



Minnesota State University Moorhead  
**RED: a Repository of Digital Collections**

---

[Undergraduate Bulletins \(Catalogs\)](#)

[Course Catalogs](#)

---

2018

## **Undergraduate Bulletin, 2018-2019**

Minnesota State University Moorhead

Follow this and additional works at: <https://red.mnstate.edu/bulletins>

---

### **Recommended Citation**

Minnesota State University Moorhead, "Undergraduate Bulletin, 2018-2019" (2018). *Undergraduate Bulletins (Catalogs)*. 101.

<https://red.mnstate.edu/bulletins/101>

This Book is brought to you for free and open access by the Course Catalogs at RED: a Repository of Digital Collections. It has been accepted for inclusion in Undergraduate Bulletins (Catalogs) by an authorized administrator of RED: a Repository of Digital Collections. For more information, please contact [RED@mnstate.edu](mailto:RED@mnstate.edu).



# 2018 - 2019 Undergraduate Bulletin



## Introduction

### Mission

Minnesota State University Moorhead is a caring community promising all students the opportunity to discover their passions, the rigor to develop intellectually and the versatility to shape a changing world.

### Vision

Minnesota State University will be...

- A leader in student success
- A campus that reflects the world in which our graduates live and work
- A University that provides an education of lifelong relevance
- A place of transformation where students become graduates who are progressive leaders in their professions and their communities

### What Makes MSUM Special?

Faculty, student and staff members of the academic community have given a great deal of thought to the values and purposes that underlie the University's **mission and vision**. We have refined and focused these principles into statements to guide our daily efforts to foster student success and serve the regional and global communities.

These cornerstones of our mission and vision define what makes us special.

### Purpose *(Why do we do what we do?)*

The simplest and most idealistic answer is that our purpose is to transform the world by transforming lives.

### Our Core Values *(How do we behave?)*

- Grit
- Humility
- Heart

### Aspirational Value *(We commit to making this as pervasive as our core values)*

- Diversity and inclusion of people and ideas

### "Permission to Play" Values *(These are the expectations of membership in our academic community)*

- Integrity and mutual respect in our behavior and interactions

### Strategic Anchors *(How will we succeed?)*

We will succeed by:

- Focusing relentlessly on student achievement and students' return on their investment;
- Embedding and supporting diversity in every facet of the university; and
- Ensuring that MSUM is indispensable to the social, cultural, and economic advancement of Moorhead and the surrounding region.

### Overview

Minnesota State University Moorhead is a welcoming educational community that offers rigorous courses of study and places high expectations upon its students. Our strong commitment to faculty-mentored

undergraduate research and intellectual growth provides students with continual opportunities for personal and professional achievement. MSUM fosters an environment that encourages students to become versatile, thoughtful, innovative, and engaged leaders who contribute to their professions and their communities.

MSUM values diversity and mutual respect and strives to instill these ideals throughout the institution. MSUM honors its heritage as a respected, student-focused, public university and enhances our students' lives at the same time that it contributes to the community and the region.

MSUM offers graduate and professional programs that contribute to the state and region through increased collaboration with local and state business, industry, and human services to assure optimal preparation of graduates.

### **MSUM at a Glance**

Minnesota State University Moorhead, with an enrollment of more than 6,000 full and part-time students, offers 82 undergraduate majors with 64 emphases, 15 graduate degree programs, and 38 certificate programs. Included in our majors are 31 areas of teacher licensure preparation. Our professional programs are grounded in the liberal arts, designed to provide a broad base of knowledge and cultural themes. As a part of the higher education system established by the State of Minnesota, the University provides the advantages of a quality education at the lower costs made possible by the support of Minnesota's citizens.

### **History of Minnesota State University Moorhead**

Minnesota State University Moorhead's institutional life began in 1887 when, two years after a bill calling for its establishment was approved by the Minnesota legislature, funds were appropriated for the construction of campus buildings. Moorhead Normal School was built on land deeded to the city by the bill's author, S. G. Comstock, a former Clay County Attorney and, later, an executive with James J. Hill's Great Northern Railroad. The campus opened for classes under its first president, Livingston Lord, in August of 1888.

Moorhead Normal School was Minnesota's fourth such institution, charged with the education of those who would teach in the area's rural schoolhouses. Students graduated from these normal schools after two years, with a license to teach grades K (or 1) through 8. By the second decade of the 1900s, the demand for better-educated teachers, together with the increased numbers of students attending high school, was the motive force that prompted the development of a four-year college curriculum. This progress was marked by the school's first name change, to Moorhead State Teachers College, in April of 1921.

In late April-early May 1957, the Minnesota state legislature approved another name change, bringing into existence Moorhead State College. This change reflected the institution's "increasing diversity and breadth of purpose" (graduate programs began in 1953), and also came at a time when the campus was going through something of a construction "boomlet." Over the next 18 years, the campus added 11 new buildings and numerous new programs. The 18 years of Moorhead State College also saw the establishment of that unique educational resource, the Tri-College University.

On August 1, 1975, a ceremony was held on campus to mark the renaming of the college to Moorhead State University. All other Minnesota State Colleges were also transformed into state universities at the same time. The time of this change was surrounded by the continued growth of the University student body, a growth mirrored by the number of majors offered, which rose to more than 90 (the University currently offers more than 140 majors, including emphases and options).

In 1998, the Minnesota State Colleges and Universities Board of Trustees approved a policy authorizing the seven state universities to change their names if they wished to do so. Accordingly, after consultation with students, faculty, staff, and alumni, the campus's fifth name change to Minnesota State University Moorhead was approved by the Board of Trustees and became effective July 1, 2000.

### **The Campus**

Most of the 28 major buildings on the 119-acre campus have been constructed since 1957, including the Science Laboratory Building that opened fall semester 2004 and the Wellness Center that opened spring semester 2009. Other campus buildings include five residence halls and one apartment facility, the newly renovated Livingston Lord Library, the newly renovated Comstock Memorial (Student) Union, Kise Commons food service, the Regional Science Center, Hendrix Clinic and Counseling Center, Security/Police Substation, 11 classroom buildings, the Alex Nemzek Hall complex for men's and women's physical education, health and athletics, and Owens Hall administration building.

### **The Faculty**

There are more than 348 members of Minnesota State University Moorhead's instructional faculty. Over 70 percent of the faculty holds the highest degree in their fields. Professors teach 99 percent of classes and are advisors and mentors. A student-faculty ratio of 19-to-1 encourages undergraduates to participate in faculty-mentored research and creative projects, and the average class size is 23 students.

### **The Community**

Moorhead, Minnesota and Fargo, North Dakota are education-minded communities with Minnesota State University Moorhead, Minnesota State Community and Technical College, and Concordia College on one side of the Red River, North Dakota State University on the other. The two cities support a symphony orchestra, a community band, area youth orchestra, community Jazz Arts Group, community opera, community theatre, and several art galleries. Minnesota State University Moorhead regularly offers a Performing Arts Series, monthly art exhibits, and a number of dramatic and musical programs.

The character of this metropolitan community of more than 223,000 and growing is also determined by its rural traditions. Situated in the rich farming land of the Red River Valley, Fargo-Moorhead is the hub for wholesale and retail trade, communications, transportation, industry, and medical care in the Upper Midwest. Fargo-Moorhead was named an All-American City in 2000.

## Accreditation / Certification

### **Undergraduate Program**

Minnesota State University Moorhead is accredited by the Higher Learning Commission and a member of the North Central Association of Colleges and Schools, ([www.ncahigherlearningcommission.org](http://www.ncahigherlearningcommission.org)), 312-263-0456) to offer undergraduate four-year college programs leading to Baccalaureate degrees.

### **Graduate Program**

Minnesota State University Moorhead is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools at the Doctoral and Master's degree level and programs in School Psychology and Educational Leadership are accredited at the Education Specialist level.

### ***American Bar Association (ABA)***

Minnesota State University Moorhead's Paralegal program is approved by the American Bar Association.

### ***American Chemical Society (ACS)***

Minnesota State University Moorhead's Chemistry Department is on the approved list of the American Chemical Society.

### ***American Council of Construction Education (ACCE)***

Minnesota State University Moorhead's degree in Construction Management in the Department of Professional Management is accredited by the American Council for Construction Education (ACCE).

### ***American Speech-Language-Hearing Association (ASHA)***

The Master of Science (M.S.) degree education program in Speech-Language Pathology at Minnesota State University Moorhead is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association, 2200 Research Boulevard #310, Rockville, Maryland 20850, 800-498-2071 or 301-296-5700.

### ***Association to Advance Collegiate Schools of Business International (AACSB)***

Minnesota State University Moorhead's Paseka School of Business is accredited by the Association to Advance Collegiate Schools of Business International (AACSB). AACSB accreditation is the mark of quality distinction most widely sought after by business schools - less than 5% worldwide have earned the achievement.

### ***Commission on Accreditation of Athletic Training Programs (CAATE)***

Minnesota State University Moorhead's Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Programs.

### ***Commission on Collegiate Nursing Education (CCNE)***

The baccalaureate degree in Nursing and the master's degree in Nursing programs at Minnesota State University Moorhead are accredited by the Commission on Collegiate Nursing Education. One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791.

***Council for the Accreditation of Counseling and Related Educational Programs (CACREP)*** Minnesota State University Moorhead's graduate program in Counseling has specialized accreditation from the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). The specialized accreditation is granted by CACREP which is an accrediting body recognized by the Council for Higher Education Accreditation.

The program offers two CACREP accredited emphases: Clinical Mental Health Counseling and School Counseling (K-12).

***Council on Social Work Education (CSWE)***

Minnesota State University Moorhead is accredited by the Council on Social Work Education to offer a Bachelor of Social Work degree.

***Minnesota Board of Peace Officer Standards and Training (POST)***

Minnesota State University Moorhead is certified to educate police officers in the State of Minnesota.

***Minnesota Board of Peace Officer Standards and Training (BOSA)***

Minnesota State University Moorhead's Educational Leadership program is an approved licensure program for Principal K-12, Superintendent, Director of Special Education and Director of Community Education through the Minnesota Board of School Administrators.

***National Association of School Psychologists (NASP)***

Minnesota State University Moorhead's graduate program in school psychology is approved and meets training standards established by the National Association of School Psychologists (NASP). MSUM has been NASP/NCATE approved for 30 years. MSUM was one of the first programs in the country to receive NASP/NCATE approval. NASP is an affiliate organization of the National Council for Accreditation of Teacher Education.

***National Association of Schools of Art and Design (NASAD)***

The Minnesota State University Moorhead School of Art is an accredited institutional member of the National Association of Schools of Art and Design. MSUM offers the Bachelor of Arts and Bachelor of Fine Arts degrees.

***National Association of Schools of Music (NASM)***

Minnesota State University Moorhead's Music Department is accredited by the National Association of Schools of Music.

***National Council for Accreditation of Teacher Education (NCATE)***

The School of Teaching & Learning at Minnesota State University Moorhead is accredited by the National Council for Accreditation of Teacher Education (NCATE) (<http://www.ncate.org>). This accreditation covers all programs at the initial baccalaureate or post baccalaureate levels, and the advanced teacher education post baccalaureate levels for (1) the continuing education of teachers who have previously completed initial preparation or (2) the preparation of other professional school personnel.

Minnesota State University Moorhead's teacher licensure/endorsement programs are approved by the Minnesota Board of Teaching.

***The Association of Technology, Management and Applied Engineering (ATMAE)***

Minnesota State University Moorhead's program in Operations Management in the Department of Professional Management is accredited by the Association of Technology, Management and Applied Engineering.



## Access to Information

Minnesota State University Moorhead makes available or distributes the following information to all students, employees, prospective students and prospective employees:

### The Bulletin

It is our intention to provide resources relevant to the academic, extracurricular, and social lives of students. Every effort has been made to ensure the accuracy of the material contained within this catalog as of the date of publication. However, all policies, procedures, academic schedules, program information, and fees are subject to change at any time by appropriate action of the faculty, the MSUM administration, the Minnesota State Colleges and Universities Board of Trustees or the Minnesota Legislature without prior notification. The provisions of this catalog do not constitute a contract between the student and MSUM. The information in this catalog is for use as an academic planning tool and is subject to change at any time. Upon printing of this catalog, all previous issues are revoked.

### Academic Policies and Procedures

The University's academic policies may also be found in the Faculty Guide to Resources and Policies and Student Handbook. Information on academic policies and procedures may be obtained at the offices of Academic Affairs, Student Affairs, Admissions, Registrar, Scholarship and Financial Aid, and Academic Support Center. The University Policy website can be found [HERE](#).

### Emergency Cancellation

Classes/programs are subject to cancellation or changes in the event of inclement weather or an emergency. MSUM will seek to continue instruction through alternate means if they are available to meet the situation in the event of prolonged closure. See University Policy page for more information.

### Non-Discrimination Statement

Minnesota State University Moorhead is committed to a policy of equal opportunity and nondiscrimination in employment & education and is a member of the Minnesota State Colleges and Universities system. No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in, programs, services, and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, gender identity, gender expression, or membership or activity in a local commission as defined by law. Inquiries regarding compliance should be referred to the Designated Officer: Title IX Coordinator/Director of Student Conduct & Resolution, Owens 206, 218.477.2174 (Voice). This information will be made available in alternate format, such as Braille, large print or audio cassette tape, upon request by contacting Disability Services at 218-477-4318 (Voice); 218-477-2420 (FAX) or 1-800-627-3529 (MRS/TTY).

### Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

- **The right to inspect and review the student's education records within 45 days of the day MSUM receives a request for access.** Students should submit to the Registrar, Dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

- **The right to request an amendment to the student's education records which the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.** Students may ask MSUM to amend a record by writing the university official responsible for the record. The student must clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. MSUM will notify the student in writing of the decision and advise the student of their right to a hearing if the request was denied. Additional information regarding the hearing procedures will be provided to the student at that time.
- **The right to a written consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.** MSUM discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by MSUM in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom MSUM has contracted to provide a service (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; representatives of Minnesota State, including the Chancellor, Chancellor's staff; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities. Upon request, MSUM discloses education records without consent to officials of another school in which a student is enrolled or intends to enroll.
- **The right to file a complaint with the U.S. Department of Education concerning alleged failures by MSUM to comply with the requirements of FERPA.** The name and address of the office that administers FERPA is the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. S.W., Washington, DC, 20202.

**MSUM may disclose directory information of students. Directory information includes:**

- Name, local and permanent (hometown) address
- Phone numbers
- Major and minor fields of study
- Class level
- Dates of enrollment
- Full-time/part-time status
- Awards and honors (including Dean's list)
- Degree(s) conferred (including dates)
- Previous educational institutions and dates attended
- Past and present participation in officially recognized sports and activities
- Height and weight of athletes

**MSUM designates the following information as limited directory information:**

- Student Star ID number
- Electronic mail addresses (email addresses)
- Photographs taken and maintained by MSUM for various purposes

Accordingly, this information will not be provided to external parties not contractually affiliated with MSUM. Use and disclosure of this information shall be limited to publication on websites hosted by, on behalf of, or for the benefit of MSUM, including the online directory and those officials within MSUM who have access, consistent with FERPA, to such information.

Students may refuse to permit the disclosure of directory information if they notify MSUM's Registrar in writing they do not want such information disclosed.

### **Financial Aid**

The purpose of financial aid is to assist students with college-related expenses. Financial aid and scholarship information is available at the Office of Scholarship and Financial Aid and their [webpage](#).

### **Student Right to Know Report**

The purpose of this information is to disclose annual student completion and graduation rates, including graduation rates for student athletes. This report is available from the Office of Institutional Effectiveness and can be found [HERE](#).

### **Student Alcohol and Other Drug Policy**

#### **General Philosophy Statement**

Minnesota State University Moorhead recognizes that the misuse of alcohol and other drugs is a serious problem in our society and our community. This University seeks to create a campus environment which promotes healthy and responsible living that is conducive to the intellectual and personal development of students. The University is committed to establishing and enforcing clear campus policies regarding the use of alcohol and other drugs.

Minnesota State University Moorhead complies with and supports the Minnesota State Colleges and University Board of Trustees policy governing alcohol and other drugs on campus, the Drug Free Schools and Community Act, the Drug Free Workplace Act, the Campus Security Act and Minnesota State law. Refer to the Student Handbook for a detailed version of the policy.

#### **Drug Free Workplace and Schools**

Minnesota State University Moorhead provides information regarding University policies for alcohol and drug use on the campus in the class schedule and the Annual Campus Crime Report. This information is provided in compliance with the Drug Free Workplace Act of 1988 and the Drug Free Schools and Communities Act Amendments of 1989. The report includes:

- campus policies regarding alcohol and drug use
- campus sanctions for possession/consumption of alcohol or illicit drugs
- legal penalties for possession/consumption of alcohol or illicit drugs
- health risks associated with use of illicit drugs and alcohol

Additional information regarding the Drug Free Schools and Communities Act is available online [HERE](#).

#### **Equity in Athletics Disclosure Act Report**

The purpose of this information is to disclose athletic participation rates and financial data related to athletics. This report is available from the Office of Institutional Effectiveness [HERE](#).

## **Annual Crime Report**

MSUM's Annual Campus Crime Report is available online [HERE](#).

The Report contains

- Statistics for previous years of crimes reported on campus; in buildings or property owned or controlled by the University; and on public property within, or immediately adjacent to, the campus and reported to the University and/or the Clay County Sheriff's Department or the Moorhead Police Department.
- Crime prevention tips and campus safety programs.
- Policies and procedures concerning safety and security on the campus of Minnesota State University Moorhead including information required by the Student Right To Know, the Jacob Wetterling Act, Megan's Law, the Violent Crime and Control Law Enforcement Act of 1994, and the Drug Free Schools and Campuses Act.

If you are unable to access this report and wish a printed copy, or have other concerns about the report, please contact the Public Safety Office at (218) 477-2449.

## **Resources and Services**

### **Student Life**

For information on Student Life, click on the following link or go to "Student Life" in the upper red header: [Student Life](#)

### **Admission Information**

For information on Admissions, click on the following link or go to "Admissions" in the upper red header: [Admissions](#)

### **Financial Information**

#### **[Business Services](#)**

Tuition and fees are set by the Board of Trustees of the Minnesota State Colleges and Universities System and are subject to change without notice. Click on the link for information on Tuition and Fees, Payment Dates, Payment Plans, Refunds and Reciprocity.

### **Financial Aid**

For financial aid information including loan, scholarships, grants and employment opportunities please refer to:

[Scholarship and Financial Aid](#)

## Additional Educational Opportunities

### Tri-College University

Tri-College University (TCU) is a consortium which includes North Dakota State University, Concordia College, Minnesota State University Moorhead, North Dakota State College of Science, and Minnesota State Community & Technical College. Students at the five schools may benefit from what each school offers individually and cooperatively through the consortium.

Information concerning the tri-college agreement, policies and procedures may be found [HERE](#).

### Reserve Officers Training Corps (ROTC)

#### Air Force ROTC/Aerospace Studies

The Air Force Reserve Officer's Training Corps (AFROTC) program is an educational and training program designed to give men and women the opportunity to become Air Force officers while completing an undergraduate or graduate degree. In order to receive a commission, Air Force ROTC students must complete all requirements for a degree in accordance with University rules and regulations, as well as complete a variety of courses specified by the Air Force.

**Program Description:** The Aerospace Studies curriculum is divided into two courses of instruction: the General Military Course (GMC), which parallels the freshman and sophomore academic years, and the Professional Officer Course (POC), which parallels the junior and senior academic years. Students in the four-year program normally attend two weeks of field training at Maxwell AFB, AL during the summer between their sophomore and junior years.

**Scholarships:** Air Force ROTC can help you to overcome the financial hardships associated with college, and when you complete your degree, you have a guaranteed career after school. AFROTC college scholarships are awarded to the best-qualified students and range in length from one to five years. These grants cover the cadet's tuition, incidental lab fees and most textbooks. In addition, cadets receive a tiered monthly allowance. Incentive scholarships are also available for students not already on scholarship.

**Contact Information:** If you are interested in the AFROTC program through North Dakota State University, see the Records Office for information on Tri-College registration. You may also contact the department of Aerospace Studies at NDSU at 701-231-8186 or visit [www.ndsu.edu/afrotc/](http://www.ndsu.edu/afrotc/) for more information.

#### Army ROTC/Military Studies

The Army Reserve Officers' Training Corps (Army ROTC) prepares and commissions officers for the Active Army, Army National Guard, and the Army Reserves. ROTC is open to male and female students from Concordia College, North Dakota State University, and Minnesota State University Moorhead through the Tri-College program. Cadets must complete all degree requirements of their chosen major, in accordance with university rules and regulations, and complete required ROTC courses prior to commissioning as a Second Lieutenant. ROTC students also attend physical training and a hands-on leadership lab.

**Program Description:** The Army ROTC program consists of a two-year basic course (freshman and sophomore year) and a two-year advanced course (junior and senior year). During the basic course, there is no military obligation for non-contracted cadets and a student may withdraw at any time. Students, who have Active Duty

military experience, are currently a member of the Army Reserve/National Guard, complete the Leader's Training Course, or have taken Junior ROTC may receive credit for the Basic Course. Eligible students are allowed to enter the advanced course and must agree to complete ROTC to commission as a Second Lieutenant. Advanced Course students will also complete the 29-day Leader Development and Assessment Course (LDAC) between their junior and senior years.

**Scholarships:** Two, three, and four year scholarships are available, which provide for payment of tuition and fees. Students receive \$600 per semester for books and equipment, and an allowance of \$350 to \$500 per month for each year the scholarship is in effect. Generally, four-year scholarships are awarded to high school students who wish to compete during their senior year for a scholarship, but college freshmen also have been awarded this highly desirable scholarship.

**Service Commitment:** Students who decide to commission on Active Duty have an eight year service commitment after graduation; four years serving on Active Duty and the option of serving the remaining four years on Active Duty, Army National Guard, Army Reserve, or the Individual Ready Reserve. Army National Guard officers have an eight year commitment; six years in the National Guard with the option of serving the remaining two years in the Army National Guard or the Individual Ready Reserve. Army Reserve officers have an eight year service commitment after graduation.

**Contact Information:** For further information, call the Department of Military Science office at 701-231-7575 or visit the Tri-College Army ROTC website at [www.ndsuarmyrotc.com](http://www.ndsuarmyrotc.com). The Department of Military Science is located on the North Dakota State University campus at Bentson Bunker Fieldhouse.

### **National Student Exchange**

Minnesota State University Moorhead holds membership in the National Student Exchange, a cooperative relationship among more than 180 (NSE) colleges and universities in the United States and its territories. Through the NSE, students may spend up to one full year in residence at a participating college as an exchange student. MSUM students have recently been placed at California State University-San Bernardino, University of Oregon, University of Alaska, University of Northern Colorado, University of Guam, and the University of Hawaii. The largest single benefit of the NSE is the privilege of paying tuition at the in-state rather than out-of-state rates.

Students pursuing a professional/licensure degree need to consult with their advisor and plan their program carefully well before enrolling in National Student Exchange. Students wishing to participate in NSE should contact the NSE Coordinator, Owens 206, for more information at (218) 477-2171, or by visiting the website at <http://www.mnstate.edu/academics/programs/nationalstudentexchange.aspx>.

### **Academic Service-Learning**

Academic Service-Learning (AS-L) is a credit bearing, educational experience in which students participate in organized service activity that meets identified community needs and reflects on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility.

Service learning is an exciting teaching/learning strategy that enriches the curriculum by combining meaningful community service with academic learning. Service learning provides "real life" experiences by linking students with local communities and service providers. Reflection and reciprocity are key concepts of service learning. AS-L has been integrated in disciplines across the MSUM campus including Communication Studies, Accounting, Education, Music, Nursing, Paralegal, Sociology, and Social Work. Refer to the AS-L

website at <http://www.mnstate.edu/asl/> for additional information or contact the Service-Learning Coordinator at (218) 477-2019.

### **Internship**

An internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths and give employers the opportunity to guide and evaluate talent. (*National Association of Colleges and Employers, 2012.*) An additional objective of internships is to allow students to gain applied experience that would not otherwise be possible in the classroom and to reinforce the choice of one's major field of study.

Internships can be paid or unpaid, for credit or not. They vary in length, and may be full time or part time. Some academic programs require an internship to graduate and some do not. All students are also encouraged to visit the Career Development Center to explore internship options, and review the many posted opportunities through DragonJobs ([www.mnstate.edu/dragonjobs](http://www.mnstate.edu/dragonjobs)).

**Students who wish to or are required to complete an internship for academic credit must meet with the internship coordinator in the academic major of their choice.** Some academic internship coordinators receive internship listings that are not posted on the MSUM Career Development Center website. Academic internship coordinators are the contacts who determine academic and credit expectations for internships.

### **International Study Opportunities**

The Study Abroad Office coordinates a variety of opportunities for students to study abroad. Detailed planning is essential to ensure a successful experience. Students must consult with their faculty advisors if they wish to receive credit toward their major or minor. Financial Aid may be applicable toward these study programs. In addition to semester and year-long study, faculty in various departments organize one-, two-, or three-week study tours for credit. Students wishing to study abroad should contact 218-477-2993 or visit the Study Abroad office in Bridges 250. Students can also access information on the web at <http://www.mnstate.edu/studyabroad/>.

### **Senior Citizens**

Residents of Minnesota age 62 or older before the beginning of the term may either (a) audit a class free without credit or (b) receive credit by payment of an administrative fee of \$20.00 per credit, if space is available after all tuition paying students are enrolled. Senior citizens also must bear the cost of any laboratory or course fees, regardless of whether credit is earned or not. Contact the Registrar's Office for additional information.

## Academic Information

*The most current University Policies can be found on the [University Policies and Procedures webpage](#).*

### Academic Year

The academic year at Minnesota State University Moorhead is arranged into fall and spring semesters of approximately 16 weeks each and a summer semester offering a variety of start and end dates comprised of variable week and short-term workshop sessions.

Students may enter the university at the beginning of any term although the academic year begins officially with the fall semester.

### Academic Requirements

Within practicable limits, academic policies and requirements at MSUM are not retroactive. Students entering a degree program can expect to complete the program under the requirements specified at the time of enrollment, unless enrollment is interrupted for more than one year. When a required course is no longer offered, students may substitute another course or courses with the approval of the department chair. Individual exceptions to major and minor requirements listed in the university catalog, including the waiver or substitution of courses, are subject to the approval of the department chair by written notice to the Registrar's Office. Records of approved changes will be retained in student files until graduation or five years after the last term of enrollment.

### Academic Credit Hour

The unit of credit at Minnesota State University Moorhead is the semester hour.

In accordance with federal guidelines, academic credit hours for a course are determined by the amount of work represented in intended learning outcomes and verified by evidence of student achievement. The institutionally established equivalency is not less than:

- One semester hour of credit is awarded for 750 minutes of classroom or direct faculty instruction and a minimum of 1800 minutes of out-of-class student work each week for approximately 15 weeks, or the equivalent amount of work over a different amount of time; or
- At least an equivalent amount of work as required in item (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practicum, studio work, and other academic work leading toward the award of credit hours.
- For laboratories, a minimum of 100 minutes per week for 15 weeks is equivalent to one credit.
- One semester credit of field experience requires a minimum of 40 hours of direct experience.
- For alternate course formats which do not meet faculty contact requirements credit is awarded based on the equivalent face-to-face course or by assessing the amount of work required by the student.

Each academic year shall consist of at minimum 144 instructional days.

### Alternative Course Formats

Any course not fitting the traditional 50 minutes per week for each credit in a face-to-face classroom. This includes but is not limited to:



- Accelerated course defined as courses with the normal number of seat-time hours but in a more compressed time than a traditional semester length.
- Hybrid courses defined as reduced seat time with an online component with the same outcomes as the traditional in-seat class.
- Online courses defined as completely presented in an online environment with the same outcomes as the traditional in-seat class.
- Internships defined as similar hours as a traditional course per credit.
- Clinical rotations defined as a minimum of similar hours as a traditional course per credit with specific identified outcomes. Time frames may be dictated by an accrediting agency.
- Individual study or research. The scope of the study or research to require the average student to work an average of three hours a week per credit for 15 weeks.

### **Classification of Students**

Students at Minnesota State University Moorhead are divided into classes as follows:

Freshman	0-29 credits
Sophomore	30-59 credits
Junior	60-89 credits
Senior	90 or more credits

Special students not participating in a degree program are admitted on an individual basis and classified separately.

### **Academic Honesty**

The university expects all students to represent themselves in an honest fashion. In academic work, students are expected to present original ideas and give credit for the ideas of others.

When an instructor has convincing evidence of cheating or plagiarism, a failing grade may be assigned for the course in which the student cheated. When a failing grade is assigned for this reason, the instructor shall report the offense, the evidence, and their action to the Provost and Senior Vice President for Academic Affairs. If the instructor (or any other person) feels the seriousness of the offense warrants additional action, the incident may be reported to the Office of Student Conduct and Resolution. The Director of Student Conduct and Resolution will follow procedures set out in the Student Conduct Code. After the review of the case and a fair, unbiased hearing, the Director of Student Conduct and Resolution may take disciplinary action if the student is found responsible (see [Student Conduct Code](#) for details).

A student who has a course grade reduced by an instructor because of cheating or plagiarism, and who disputes the instructor's finding, may appeal the grade, but only by using the Grade Appeal Policy, which states that the student must prove the grade was arbitrary, prejudicial, or in error.

### **Advising**

Academic advising is designed to assist each student in the development of a meaningful educational plan compatible with the student's interests, abilities, and life goals. Academic advising is an ongoing and collaborative process and requires the student and advisor meet at least once each semester.

### **Students may expect their advisors:**

- Have knowledge of the university curriculum requirements and are able to provide accurate information;
- Are informed about university policies, procedures, support services, and resources;
- Are reasonably available for consultation by having posted office hours and/or appointment times;
- Have knowledge of career opportunities and appropriate graduate programs in their fields; and
- Will refer the student to specialized institutional and community resources when necessary.

### **Advisors may expect the student:**

- Will make and keep appointments;
- Will prepare for advisor appointments by bringing their degree audit report (DARS) to the appointment and giving thoughtful consideration to life/career goals, fields of study, and personal interests;
- Will keep their advisor informed when there are changes in objectives, course selection, academic plans, or progress;
- Will maintain up-to-date personal records of academic progress and will resolve discrepancies on official grade reports and/or other university documents; and
- Recognizes that they bear the ultimate responsibility for the development and implementation of his or her academic plan of study, including meeting graduation requirements.

### **Advisor Assignment and Changes**

Students are assigned to a faculty advisor after the time of first registration. Students can find the name of their advisors in eservices. Any change of advisor may be made with the approval of the chair of the department in which the student plans to seek a major and must be reported on a Major/Advisor Change Form available from the Registrar's Office and the Academic Support Center.

### **Appeal of Undergraduate Academic Policies**

Academic Appeals can be filed to seek waiver of a graduation or Liberal Arts and Sciences Curriculum (LASC) requirements, retroactively withdraw from a course (after the withdrawal deadline has passed), and other similar situations. Appeals to retroactively withdraw cannot be accepted if five years have passed since the course in question was taken. Students can inquire in the Registrar's Office whether an appeal is appropriate in their situation.

Students may complete the appeal form and return it to the Registrar's Office, along with appropriate supporting documentation. The Academic Appeals Committee reviews student appeals and approves or denies them. Students whose appeals are denied by the Committee may appeal to the Associate Vice President for Academic Affairs whose decision is final.

### **Internship Policy**

A. Students will not be required to return to campus after completing an internship. Students should, however, be encouraged to return to campus to share their experiences.

B. Before the start date of the internship, the internship supervisor, the site evaluator, and the student shall sign an internship agreement which outlines mutual responsibilities and expectations and contains statements clearly articulating liability assumption on the part of MSUM, the site, and the student.

### C. Minimum Standards

- A minimum of one (1) semester credit and a maximum of twelve (12) semester credits will be granted.
- A maximum of twelve (12) semester credits may be counted toward a degree.
- An internship will be graded only on a pass-fail basis.
- An internship may be taken only by a student majoring in a program with an approved internship experience.
- The student must have at least junior standing.
- Internship credits will be awarded on the basis of a minimum of forty (40) hours of fieldwork per semester per credit received.
- Each internship must have a written agreement outlining the mutual expectations and responsibilities of MSUM, the site, the department, and the student.
- The internship agreement will be kept on file in the department office for six years.
- Every internship will be evaluated by the department internship coordinator or the internship supervisor.

### D. Departmental Expectations

All departments offering internships must have a current internship document on file in the Office of the Provost and Senior Vice President for Academic Affairs, and in the office of the appropriate dean. The document shall include statements of the:

- Objectives of the internship program.
- Responsibilities of the student, the faculty supervisor, and the site evaluator.
- Departmental procedures for approving internships.
- Means of reporting results or accomplishments.
- Method(s) of assessment.
- Expectations and procedures of monitoring internship achievements.
- Departmental practice on faculty workload, if any.
- Departmental policy on internship compensation.
- Name of a designated departmental internship coordinator.

### **First Year Seminar Graduation Requirement**

All new entering undergraduate students are required to successfully complete a 1-credit hour First Year Seminar. Successful completion of the course is a graduation requirement. New students who have completed twelve or more transferable credits will be exempt from this requirement.

### **Learning Communities**

MSUM Learning Communities provide students who live on campus with an academic advantage. Communities help students make a smooth transition into college life and facilitate an environment that enhances learning potential outside the classroom. Students who are a part of a Learning Community gain exposure to campus resources, university faculty and staff, and to a support network of classmates who share the same major or similar interests. Learning Community students will take classes together, live on the same floor in the residence hall, and have full access to an upper-class mentor who lives on the floor. Students will have the opportunity to get to know faculty within their major. Learning Communities help students set academic goals, develop study skills, engage in leadership opportunities outside of the classroom, and provide students with the opportunity to volunteer within the campus and local community. Please visit [Learning Communities online](#) for more information.

## Background Checks

Minnesota law requires any person who provides direct contact services to people receiving services from facilities and agencies licensed by the Minnesota Department of Human Services (DHS) and/or the Minnesota Department of Health (MDH) have a background study conducted by the state. Direct contact is defined as providing face-to-face care, training, supervision, counseling, consultation, or medication assistance to people receiving services from the agency or facility. Any individual who is disqualified from having direct patient contact as a result of the background study will not be permitted to participate in a clinical placement in a DHS or MDH licensed facility or agency. Failure to participate in a clinical placement required by the academic program could result in ineligibility to qualify for a degree in this program.

Students whose programs may involve DHS or MDH licensed facilities or agencies should contact the chair of their major program. Forms may be obtained from the program chair.

## Student Liability

Students are liable for their actions and may be sued (along with others) for damages due to negligence. Minnesota State University Moorhead has a Student Intern Professional Liability Policy which covers students engaged in internships. The coverage is for \$2,000,000 per occurrence and \$5,000,000 in annual aggregate. In addition, some internships and academic programs may require students to purchase separate liability insurance.

If the student or his/her academic department or clinical practicum site does not have a formal internship agreement, and therefore does not have a formally acknowledged internship (i.e. no credit hours, etc.), the student is NOT covered by the University Student Intern Professional Liability Policy.

Students completing their practicum work in area schools can receive liability insurance through the Education Minnesota Student Program provided they are members. For more information, check out their website at <http://www.educationminnesota.org/member-benefits/membership/students.aspx>.

## Grades and Grade Points

All study for university credit is recorded with the following grade designations:

A+	4.00 Grade points per credit
A	4.00 Grade points per credit
A-	3.67 Grade points per credit
B+	3.33 Grade points per credit
B	3.00 Grade points per credit
B-	2.67 Grade points per credit
C+	2.33 Grade points per credit
C	2.00 Grade points per credit
C-	1.67 Grade points per credit
D+	1.33 Grade points per credit
D	1.00 Grade point per credit
D-	0.67 Grade points per credit
F	0.00 Grade points per credit
FN	0.00 Grade points per credit
I	Incomplete
P	Pass
IP	In Progress

AU     Audit

W     Withdrawal

EX     Exchange – used to document registration. This grade does not affect GPA or Satisfactory Progress. Grade changes may be submitted by the instructor or dean up to three years after the conclusion of the course.

### **Grade Point Average**

The grade point average (GPA) is computed by dividing the number of grade points earned in a given course or courses by the number of credits attempted. The GPA is based on MSUM grades only. Transfer courses are not used in computing the GPA.

Credits with grades of “P”, “I”, “IP”, “AU”, “W”, or “EX” are not included in computing the GPA.

Credits with grades of “F” and “FN” are included in computing the GPA.

### **In Progress Grades**

The grade of in progress or "IP" is reserved for special cases and means the particular course is not designed to be completed by the end of the term. An "IP" must be completed by the student within two semesters (undergraduate courses) and four semesters (graduate courses), not including summer. If the in progress grade is not completed within the specified time, a grade of "F" will be awarded. Students should never complete the course by re-registering for the class. "IP" grades will be converted to "F" before a degree is conferred.

### **Pass-Fail Courses (P/F Grades)**

Certain courses which offer insufficient opportunity for graded evaluation may be offered with only the grading options of Pass “P” or Fail “F”. Student teaching and internships are always graded on a pass-fail basis.

### **Pass-Fail Courses (P/F Grades) Option**

Students with sophomore, junior, or senior standing may request to take letter graded courses on a P/F basis. Students may not request this option for courses required for their major or minor program. No course taken with P/F grading may be applied to the Liberal Arts and Sciences Curriculum (LASC).

Students may make this request for only one course per semester. Students may apply up to 16 credits under the P/F grading option to a baccalaureate degree program.

No letter graded course which a student has previously failed may be repeated under the P/F grading option. A grade of "P" will be recorded for any course successfully completed under the P/F option. The grade of "F" will be recorded if the course is failed and computed in the GPA.

A P/F grading form to request the P/F grading option must be returned to the Registrar's Office on or before the tenth class day of the semester. Summer session due dates vary based on the length of individual sessions and classes. Once the form has been submitted, the student may not change the course back to letter grading.

### **Incomplete Credits**

The mark of Incomplete “I” is granted when students are unable to complete course requirements for reasons beyond their control and when arrangements have been made with the instructor before the end of the semester. If an incomplete requires substantial class attendance in a subsequent term, the student must register to repeat the course and pay tuition and fees.

"I" grades are administered by completion of the "Incomplete Grade" form by the student and instructor. "I" grades must be completed by the finish of the next semester or they will change to "F". All "I" grades will be converted to an "F" before a degree is conferred. Grade changes may be submitted as outlined above.

### **Course Grade Appeals**

All students have the right to expect thoughtful and clearly defined approaches to course grading, but it must be recognized that varied standards and individual approaches to grading are valid. Course grading methods should be thoroughly explained to students at the beginning of the semester and must appear on the course syllabus.

In a course grade appeal, only arbitrariness, prejudice, and/or error will be considered as a legitimate bases for an appeal.

**Arbitrariness:** *The grade awarded represents such a substantial departure from accepted academic norms as to demonstrate that the instructor did not exercise professional judgment in the matter.*

**Prejudice:** *The grade awarded was motivated by ill will, and is not indicative of the student's academic performance.*

**Error:** *The instructor made a mistake, or failed to give students required notice of grading policies in the syllabus.*

If a student believes that discrimination or harassment were factors in the determination of the course grade awarded, a complaint should be filed with the Affirmative Action Officer under Minnesota State Colleges and Universities board policy.

A student may appeal a grade reduced for academic dishonesty through the course grade appeal policy. The course grade appeal process must be initiated by the student prior to the close of week six of the following semester. If the student moves to the formal grade appeal process it must be completed before the end of the semester in which the appeal was initiated. In cases where an incomplete was originally assigned, an appeal must be made within six weeks of the date the final grade is posted by the Registrar's Office and available to the student on the web. If the student uses the formal process, the process must be completed during the first ten weeks of the next academic year term.

### **Course Grade Appeal Process**

#### **Step 1: Informal Process**

- The student will discuss the issue with the instructor, and may consult with the department chairperson, in an attempt to resolve the matter.
- If the matter is not resolved to the student's satisfaction, the student may discuss the issue with the dean in whose college the course was offered. If the matter cannot be resolved informally, the student may choose to file a formal appeal.

#### **Step 2: Formal Process**

- The student must request a "Course Grade Appeal" form from the dean. The student will submit the completed form, along with any supporting documentation, to the dean. It is recommended the student keep a copy of all materials submitted. The dean will send the form and supporting documentation to the instructor.
- The dean will discuss the matter with the instructor and the student in an attempt to resolve the appeal.

- If no resolution can be reached, an ad hoc college committee will be formed. The dean will contact the Faculty Association President and request the appointment of one faculty member from the academic department offering the course, two faculty members from other departments within the college, and two upper division students who are majors in fields represented in that college. The dean will ask for a volunteer from among the appointees to chair the committee.
- The instructor of the course will submit a written response to the appeal and supporting documentation of their choosing. The student will receive a copy of the material. Any material content protected by data privacy statutes will be redacted.
- The ad hoc appeals committee performs an investigative role and may request additional written information from the student and/or the instructor through the committee chairperson or the dean.
- Based on the information submitted, the committee will prepare a written finding with regard to the issues raised in the appeal. The committee will speak to one or more of the criteria as the basis for its finding. The committee chairperson will forward a written copy to the student, instructor, and dean.
- The instructor and the student may each respond in writing to the dean if they believe the committee's findings are acceptable or unacceptable. If either does not respond within seven days, the dean will assume the committee's written findings are acceptable to that person.
- If no resolution has been reached, the dean will review the written findings of the committee and the responses of the instructor and the student. The dean will send his/her recommendation, the committee's written finding, and all supporting documentation and correspondence to the Associate Vice President of Academic Affairs (or designee), the students, and the instructor.
- The Associate Vice President for Academic Affairs (or designee) will review all the materials and submit a written recommendation to the President (or designee), and copies of that recommendation to the student and instructor. The President (or designee) will make the final decision.
- The final decision may take the form of a recommendation to the instructor, change of grade, and/or determination that no action is warranted.
- If at any time during the formal course grade appeal process resolution is reached, the course grade appeal process terminates.

## Registration Procedures

### Registration

Prior to registration, students will plan a program with an advisor and receive their registration access code. Registration must be completed and all tuition and fees paid to Business Services according to published deadlines in order to avoid assessment of late payment fees.

Class schedules and descriptions of the registration procedures for any semester may be found on the [Registrar's Office page](#).

### Tri-College University Registration

Students who are enrolled at Minnesota State University Moorhead, North Dakota State University, Concordia College, Minnesota State Community and Technical College, or North Dakota State College of Science may complete a portion of their coursework at any of these institutions through the Tri-College University. Registration procedures for tri-college coursework may be found on the [Registrar's Office page](#).

## **Auditing Courses**

Students who wish to audit or attend a course without seeking credit must be admitted to MSUM, be registered for the course, and pay full tuition and fees. Classes taken for audit are not eligible for financial aid and do not count toward full-time status. Students may be billed for financial aid if classes taken for credit are later changed to audit status.

To audit a course, students shall attend class sessions but are not required to complete assignments or projects, participate in discussions, take examinations, or meet other requirements.

Students may declare the intent to audit a course by submitting a course audit form signed by the instructor by the tenth class day of a semester. Summer session dates vary based on the length of individual sessions; refer to drop dates posted on the [Registrar's Office page](#).

Students may not receive credit for auditing a course except by re-enrollment for credit and successful completion of the course in a subsequent semester.

An entry of “AU” (Audit) is made on a student’s permanent academic record.

## **Repeating Courses**

Students who wish to take advantage of the repeated course opportunity to improve a grade must repeat the course at MSUM, with one exception only. MSUM students may register for a tri-college course to repeat a course previously taken at MSUM under current tri-college policies. If a course is completed at MSUM and an attempt is made to repeat the course elsewhere, the credit is considered duplicate and is not eligible for transfer. When a course is repeated at MSUM, all attempts remain on the academic record but only the credits, grades, and related honor points for the most recent attempt will be used in calculating the cumulative grade-point average and credits for graduation. Students forfeit the previous grade no matter what grade is earned when the course is repeated. Courses taken for regular A-F grades may not be repeated for pass-fail grades. To assure the GPA is corrected, students must submit a repeated course form to the Registrar's Office. The form can be found on the [Registrar's Office page](#).

All course attempts will remain on the permanent academic record. All repeated courses are noted on the transcript to indicate the course was repeated in a following term and excluded from cumulative totals. A student cannot receive financial aid for more than one repetition of a previously passed course.

## **Resident Credits**

Resident credits are those registered and paid for at MSUM while attending courses offered on campus, through Tri-College, or through other designated exchange programs. Non-resident credits are those earned at another college (except in authorized exchange programs), and those credits earned through Advanced Placement, the International Baccalaureate, the College Level Examination Program, credit for prior learning, or examination for credit.

## **Excess Credit**

Freshmen or sophomores registering for more than 18 credits during any semester (nine credits during a summer session) must fill out an excess credit form. This form must be signed by both the student’s advisor and their respective college dean. No student may register for more than 20 credits without an excess credit permit. The form can be found on the [Registrar's Office page](#).



## Credits

### Academic Forgiveness Policy

Academic forgiveness gives an undergraduate student who has not been enrolled at MSUM for at least five years a one-time opportunity to establish a new GPA. Students must meet the following conditions:

- The student must not have been enrolled at MSUM for a minimum of five consecutive years prior to the “point of academic forgiveness.”
- Upon readmission, the student must demonstrate adequate academic ability by completing 12 undergraduate credits at MSUM with a minimum GPA of 2.0 (grade of “C” or higher in each class).

Academic forgiveness cannot be granted if a student has earned a post-secondary degree following his/her initial MSUM attendance and applied MSUM credits toward that degree.

### Adding or Dropping Courses

Registration changes may be made after initial registration. A class may be added through the fifth class day of the term, except for courses which begin later in the semester, or in special circumstances approved by academic appeal. Students may drop a class without record (no indication will appear on the transcript) by the fifth day of the class term, unless the course begins later in the semester or is a shorter summer session course. A class dropped after the first five days will appear on the student’s record as a withdrawal (“W”). Refunds for dropped courses may apply and guidelines may be found at <http://www.mnstate.edu/business-services/tuition/refunds.aspx>.

### Withdrawal from Enrollment

To withdraw officially from all enrolled courses, students must officially withdraw through the Academic Support Center. Students who withdraw without following this procedure will receive a grade of “F” in each course and are considered “unofficially withdrawn”. Financial Aid recipients who unofficially withdraw may incur repayment obligations. For information on withdrawing, go to the Academic Support Center website at <http://www.mnstate.edu/asc/withdraw.aspx>.

“W” grades cannot be granted if the complete withdrawal takes place later than the normal withdrawal deadline of the semester. Under special circumstances, students may pursue “retroactive withdrawal” after this deadline by filing an academic appeal with the Registrar's Office.

Any refund of tuition or fees will be according to the schedule given at <http://www.mnstate.edu/business-services/tuition/refunds.aspx>.

### Military Withdrawal

Students who are members of any branch of the U.S. military and who are unable to complete a semester due to having been called to active duty and veterans with a service connected disability as described in Part 2 of this policy, shall to the extent possible be provided one of the following options.

1.) The student may withdraw from one or more courses for which tuition and fees have been paid that are attributable to the courses and be given a full refund of tuition. The tuition and fees must be credited to the person's account at the postsecondary institution. Any refunds are subject to the requirements of the state or federal financial aid programs of origination.

Students receiving financial aid who choose this option should be made aware they may be liable for any required refunds of state or federal financial aid funds. In such a case, the student must not receive credit for the courses and must not receive a failing grade, incomplete, or other negative annotation on the student's record, and the student's grade point average must not be altered or affected in any manner because of action under this item.

2.) The student may be given an incomplete in a course and complete it upon release from active duty or upon completion of medical treatment, or upon sufficient medical recovery. Course completion may be accomplished by independent study or by retaking course without payment of tuition. Under federal financial aid policies a course that is retaken this way may not be counted toward a student's enrollment load.

3.) The student may continue and complete the course for full credit. Class sessions the student misses due to performance of active military service or due to the person's medical treatment or medical condition must be counted as excused absences and must not be used in any way to adversely impact the student's grade or standing in the class. Any student who selects this option is not, however, automatically excused from completing assignments due during the period the student is performing active military service or receiving medical treatment or recovering from a medical condition.

A letter grade or a grade of pass must be awarded only if, in the opinion of the faculty member teaching the course, the student has completed sufficient work and has demonstrated sufficient progress toward meeting course requirements to justify the grade. If in the instructor's judgment the student has completed sufficient course work to earn a grade of C or better, the student may be given credit for completion of a course. Military service members or veterans with a service connected disability covered by this procedure shall be eligible to receive a refund of amounts paid for room, board, and fees attributable to the time period during which the student was serving in active military service or receiving medical treatment or dealing with the person's medical condition and did not use the facilities or services for which the amounts were paid. Any refund of room, board, and fees is subject to the requirements of the state or federal financial aid programs of origination.

If the student chooses to withdraw, the student shall be readmitted and reenrolled as a student at the postsecondary education institution, without penalty or redetermination of admission eligibility, within two years following release from the state or federal active military service or following completion of medical treatment or sufficient recovery from the person's medical condition.

## **Transfer of Credits**

All credit evaluation will be based upon official transcripts received from the original credit issuing institution. Transfer courses will not be calculated in the MSUM cumulative GPA. Transfer courses will be included in LASC, major, and minor GPA requirements.

Transfer credit from institutions accredited by regional associations (North Central, Middle States, etc.) will be accepted by MSUM subject to limitations. Transfer credit from nationally accredited schools on the CHEA/US DOE list will be reviewed for transfer credit acceptance on a case-by-case basis.

Transfer students will receive evaluations indicating the extent and distribution of credits which are accepted by MSUM toward LASC and their degree requirements. LASC requirements will be considered complete for transfer students who complete the Minnesota Transfer Curriculum (MnTC), the North Dakota General Education Requirements Transfer Agreement (GERTA), an Associate of Arts (AA) degree, or an equivalent

(must meet credit and goal standards) Associate of Science (AS) degree. Courses will be evaluated to meet LASC goal requirements based on the sending institutions general education components or the equivalency assigned when transferred to MSUM. If general education requirements are not completed before transfer, transfer students must complete 42 credits in LASC courses and meet all goal areas. Transfer students must also meet MSUM's writing intensive requirements.

Transfer credits may not be applied to meet an area requirement (LASC, major, or minor) unless they also meet the corresponding GPA requirement for the academic area.

Courses will not be accepted in transfer to replace any grades or credits earned at MSUM. If a course is completed at MSUM and an attempt is made to repeat the course elsewhere, the credit is considered duplication and is not eligible for transfer. Students who wish to take advantage of the repeated course opportunity to improve a grade must repeat the course at MSUM, with one exception only. MSUM students may register for a tri-college course to repeat a course previously taken at MSUM under current tri-college policies. When a course presented in transfer is repeated at MSUM, the transferred course is considered duplication and removed from the GPA and credit totals. The transferred course will be forfeited regardless of the grade earned when the course is repeated at MSUM.

Courses designated at the 100-200 level at the sending institution may not be used to meet the 40 credits of upper division courses required for graduation even if they are deemed equivalent to a 300-400 level course at MSUM.

MSUM will accept for transfer, as lower division electives, a maximum of 16 semester credits of vocational or technical courses offered by technical colleges. Specific requirements in a student's major or minor field of study may be waived upon evaluation of vocational or technical courses judged by MSUM faculty to be comparable or equivalent to courses offered by MSUM. Any credit granted upon review will be in addition to the total of 16 credits of lower division electives.

Credit is NOT awarded for departmental examinations or waivers of credit except as required by the Minnesota State Colleges and Universities system.

### **Transfer Appeal Policy**

Transfer students have the right to appeal an evaluation decision. Appeals may be completed by filling out the [Transfer Evaluation Appeal form online](#).

### **Examination for Credit**

Examination for credit may be attempted only by students who are currently enrolled at MSUM. They may only be attempted when the department has announced an examination or if an individual student has received written permission from the department chair to take an exam. Credit may not be granted by examination if the student has previously or is currently registered for an equivalent course. Credit earned through examination for credit is not resident credit and may not be used to satisfy resident credit requirements for graduation. For guidelines and procedures to earn examination for credit contact the Registrar's Office or go to the [Exam for Credit form online](#).

### **Credit for Prior Learning**

MSUM recognizes that some students have learned college material prior to admission. This type of learning may occur as a result of job or volunteer experiences. MSUM provides an opportunity for its students to obtain college credit for these learning experiences. The evaluation of this type of learning is done by faculty

who teach the subject matter on campus; thus, credits cannot be evaluated in areas in which MSUM does not have faculty expertise. Credit acquired in this manner is generally not transferable to other institutions of higher education and does not meet this university's resident credit requirement. Credit for prior learning is not granted for graduate credits.

Students who have been admitted to a degree program at MSUM and completed a minimum of 16 credits with a GPA of 2.0 or better are eligible to apply for credit for prior learning. Application includes the presentation of a portfolio of information that validates what has been learned. Information regarding the procedure for granting this credit may be found at the Registrar's Office or go to [Credit for Prior Learning form online](#).

### Advanced Placement Credit (AP)

Advanced Placement (AP) is a program of The College Board through which a high school student completes college-level courses that are designated as AP in high schools. A student may earn college credits by demonstrating a specified level of performance on AP examinations. The AP exams, which are scored on a 5-point scale, can be taken by any student who feels prepared by independent study or other preparation as well as by students who complete AP courses. AP Score Reports are sent to the colleges or universities designated on your exam answer sheet. Students who do not designate MSUM on their answer sheet may contact AP Services (see below) to have scores sent to MSUM. The code for MSUM is **6678**.

In accordance with Minnesota State System policy (3.15), a minimum score of three is required to receive credit for the Advanced Placement (AP) examinations. AP exams will be granted the same number of credits as the course they replace. If MSUM does not have an equivalent course, free elective credit may be awarded. Credit earned through AP is not residence credit and may not be used to satisfy residence-credit requirements for graduation. AP credit may be used toward Liberal Arts and Sciences Curriculum requirements.

The policies and procedures concerning the awarding of this credit may be found on the [Registrar's Office page](#). The following AP subjects and scores are used to award equivalent courses and credit at MSUM. While every effort is made to keep this information up-to-date, scores and equivalencies may be subject to change.

AP Subject	AP Code	AP Course	Accepted Score	Equivalent MSUM Course	LASC Goal(s)
<b>Arts</b>	AP13	Art History	3,4,5	Elective	GOAL 6
	AP14	Studio Art-Drawing Portfolio	3	ART 101	GOAL 6
	AP14	Studio Art-Drawing Portfolio	4,5	ART 101 & ART 102	
	AP15	Studio Art 2-D Design Portfolio	3,4,5	ART 125	
	AP16	Studio Art 3-D Design Portfolio	3,4,5	ART 126	
	AP75	Music Theory	3	MUS 107A + elective	

	AP75	Music Theory	4,5	MUS 107A & MUS 108A + elective	
	AP76	Music Aural Subscore	3	MUS 107B + elective	
	AP76	Music Aural Subscore	4,5	MUS 107B & MUS 108B + elective	
	AP77	Music Nonaural Subscore	3,4,5	Elective	
<b>English</b>	AP36	English Language & Composition	3	ENGL 101	GOAL 1B
	AP36	English Language & Composition	4,5	ENGL 101 + elective	GOAL 1B
	AP37	English Literature & Composition	3	ENGL 101	GOAL 1B
	AP37	English Literature & Composition	4,5	ENGL 101 + elective	GOAL 1B
	AP91	English Language/ Literature/Composition	3	ENGL 101	GOAL 1B & GOAL 6
	AP91	English Language/ Literature/Composition	4,5	ENGL 101 + elective	GOAL 1B & GOAL 6
<b>History &amp; Social Science</b>	AP58	Comparative Govt. & Politics	3,4,5	POL 150	GOAL 5 & 8
	AP43	European History	3,4,5	Elective	GOAL 5
	AP53	Human Geography	3,4,5	GEOS 111	GOAL 5
	AP34	Microeconomics	3,4,5	ECON 202	GOAL 5
	AP35	Macroeconomics	3,4,5	ECON 204	GOAL 5
	AP85	Psychology	3	PSY 113	GOAL 5

	AP85	Psychology	4,5	PSY 113 + elective	GOAL 5
	AP57	U.S. Government & Politics	3,4,5	POL 120	GOAL 5
	AP07	U.S. History	3	HIST 121	GOAL 5
	AP07	U.S. History	4,5	HIST 121 & HIST 122	GOAL 5
	AP93	World History	3	HIST 104	GOAL 5 & 8
	AP93	World History	4,5	HIST 104 & HIST 105	GOAL 5 & 8
<b>Math &amp; Computer Sciences</b>	AP66	Calculus AB	3,4,5	MATH 261	GOAL 4
	AP68	Calculus BC	3,4,5	MATH 262	GOAL 4
	AP69	Calculus AB Subscore Grade	3,4,5	MATH 261	GOAL 4
	AP31	Computer Science A	3,4,5	CSIS 152	
	AP90	Statistics	3,4,5	MATH 234	GOAL 4
<b>Sciences</b>	AP20	Biology	3,4	BIOL 104	GOAL 3
	AP20	Biology	5	BIOL 104 & BIOL 109/BIOL 109L	GOAL 3L
	AP25	Chemistry	3	CHEM 150/CHEM 150L	GOAL 3L
	AP25	Chemistry	4,5	CHEM 150/CHEM 150L & CHEM 210/CHEM 210L	GOAL 3L
	AP40	Environmental Science	3,4,5	Elective	GOAL 10

	AP80	Physics C Mechanics	3,4,5	PHYS 160	GOAL 3L
	AP82	Physics C Electricity & Magnetism	3,4,5	PHYS 161	GOAL 3L
	AP83	Physics I	3,4,5	PHYS 160	GOAL 3L
	AP84	Physics II	3,4,5	PHYS 161	GOAL 3L
<b>World Languages &amp; Cultures</b>	AP28	Chinese Language & Culture	3,4,5	Elective	GOAL 8
	AP48	French Language & Culture	3,4,5	Elective	GOAL 8
	AP55	German Language & Culture	3,4,5	Elective	GOAL 8
	AP60	Latin	3,4,5	Elective	GOAL 8
	AP87	Spanish Language & Culture	3	SPAN 101	GOAL 8
	AP87	Spanish Language & Culture	4,5	SPAN 101 & SPAN 102	GOAL 8
	AP89	Spanish Literature & Culture	3,4,5	Elective	GOAL 8

### International Baccalaureate Credit (IB)

MSUM recognizes the International Baccalaureate (IB) program, offered at many high schools in the United States and abroad, which allows students to take examinations for credit. In accordance Minnesota State System policy 3.16, a student shall receive three (3) or more course credits for scores of 4 or higher on individual Higher Level IB examinations. A student shall receive two (2) or more credits for scores of 4 or higher on individual Standard Level IB examinations. To receive this credit, students must have an official score report sent to MSUM. Credit earned through IB examination is not resident credit and may not be used to satisfy resident credit requirements for graduation. IB credit may be used toward LASC requirements. The policies and procedures concerning the awarding of this credit may be found on the [Registrar's Office page](#). The following IB subjects and scores are used to award equivalent courses and credit at MSUM. While every effort is made to keep this information up-to-date, scores and equivalencies may be subject to change.

IB Exam - Standard Level (SL), Higher Level (HL)	MSUM Equivalency	Credit Hours	LASC Goal(s)
Biology (HL)	Elective	3	Goal 3L
Biology (SL)	Elective	2	

Business Management (HL)	Elective	3	
Business Management (SL)	Elective	2	
Chemistry (HL)	Elective	3	Goal 3L
Chemistry (SL)	Elective	2	
Computer Science (HL)	Elective	3	
Computer Science (SL)	Elective	2	
Dance (HL)	Elective	3	
Dance (SL)	Elective	2	
Design Tech (HL)	Elective	3	
Design Tech (SL)	Elective	2	
Economics (HL)	Elective	3	Goal 5
Economics (SL)	Elective	2	
Environmental Systems & Societies (SL)	Elective	2	
Extended Essay	Elective	3	
Film (HL)	Elective	3	
Film (SL)	Elective	2	
Further Mathematics (HL)	Elective	3	
Further Mathematics (SL)	Elective	2	
Geography (HL)	Elective	3	Goal 5
Geography (SL)	Elective	2	
Global Politics (HL)	Elective	3	
Global Politics (SL)	Elective	2	
History (HL)	Elective	3	Goal 5
History (SL)	Elective	2	
History of East & SE Asia, Oceania (HL)	Elective	3	
History of Europe (HL)	Elective	3	Goal 5
History of the Americas (HL)	Elective	3	Goal 5
History of Asia/Middle East (HL)	Elective	3	Goal 8
History of Africa (HL)	Elective	3	Goal 8
Info Tech Global Society (HL)	Elective	3	Goal 8
Info Tech Global Society (SL)	Elective	2	
Islamic History (HL)	Elective	3	Goal 8
Islamic History (SL)	Elective	2	
Literature & Performance (HL)	Elective	3	
Literature & Performance (SL)	Elective	2	
Mathematic Studies (SL)	Elective	2	



Mathematic Methods (SL)	Elective	2	
Mathematics (HL)	Elective	3	
Mathematics (SL)	Elective	2	
Music (HL)	Elective	3	
Music (SL) (group)	Elective	2	
Music (SL) (composition)	Elective	2	
Music (SL) (solo)	Elective	2	
Philosophy (HL)	Elective	3	Goal 6
Philosophy (SL)	Elective	2	
Physics (HL)	PHYS 200	3	
Physics (SL)	Elective	2	
Psychology (HL)	Elective	3	Goal 6
Psychology (SL)	Elective	2	
Sociology Cultural Anthropology (HL)	SOC 110	3	
Sociology Cultural Anthropology (SL)	Elective	2	
Sports, Exercise and Health (SL)	Elective	2	
Theatre Arts (HL)	Elective	3	
Theatre Arts (SL)	Elective	2	
Theory of Knowledge	Elective	3	
Visual Arts (HL)	Elective	3	
Visual Arts (SL)	Elective	2	
World Cultures (HL)	Elective	3	Goal 8
World Cultures (SL)	Elective	2	
World Religions (SL)	Elective	2	
World Studies Extended Essay	Elective	3	
Languages (all HL) *exceptions listed below	Elective	3	
Languages (all SL) *exceptions listed below	Elective	2	
Spanish B (SL)	SPAN 101	4	
Spanish B (HL)	SPAN 101/SPAN 102	6	
Japanese B (SL)	JAPN 101	4	
Japanese B (HL)	JAPN 101/JAPN 102	8	

### College Level Examination Program (CLEP)

CLEP (College Level Examination Program) is a testing program of The College Board designed to measure prior learning. A student may earn college credits by achieving a specified level of performance on a CLEP examination.

In accordance with Minnesota State System policy (3.33), MSUM will grant college credit to students who earn a score of 50 or higher on CLEP examinations, with the exception of Level 2 foreign language exams, for which a minimum score of 60 for German, 59 for French, and 63 for Spanish is required. CLEP exams will be granted the same number of credits as the course they replace. If MSUM does not have an equivalent course, free elective credit may be awarded. Credit will be awarded only if students achieve standard scores recommended by the Council on College-Level Examinations. However, credit will not be given to students who have previously or are currently enrolled in courses in the same subject.

MSUM does not accept CLEP credits after a student's first semester at the university.

Credit earned by CLEP exams may be applied to Liberal Arts and Sciences Curriculum but may not be applied to a major curriculum except with departmental approval. Credit earned through CLEP exams is not resident credit and may not be used to satisfy resident credit requirements for graduation.

The policies and procedures concerning the awarding of this credit may be found on the [Registrar's Office page](#). The following CLEP subjects and scores are used to award equivalent courses and credit at MSUM. While every effort is made to keep this information up-to-date, scores and equivalencies may be subject to change.

<b>CLEP Examination</b>	<b>Accepted Score</b>	<b>Equivalent MSUM Course</b>	<b>Credit Hours</b>	<b>LASC Goal(s)</b>
American Government	50	POL 120	3	GOAL 5
American Literature	50	Elective	6	GOAL 6
Analyze and Interpret Literature	50	Elective	4	GOAL 6
Calculus	50	MATH 261	4	GOAL 4
College Math	50	MATH 110	3	GOAL 4
College Algebra	50	MATH 127	3	GOAL 4
College Composition	50	ENGL 101	3	GOAL 1B
College Composition Modular	50	ENGL 101	3	GOAL 1B
English Literature	50	Elective	4	GOAL 6
Financial Accounting	50	Elective	3	
French Level 1	50	Elective	6	
French Level 2	59	Elective	12	
Humanities	50	Elective	3	GOAL 6
General Biology	50	Elective	4	GOAL 3
Natural Sciences	50	Elective	6	GOAL 3L
General Chemistry	50	CHEM 102	4	
German Level 1	50	Elective	6	
German Level 2	60	Elective	12	
History of the US 1: To 1877	50	HIST 121	4	GOAL 5

History of the US 11: 1865-Present	50	HIST 122	4	GOAL 5
Human Growth & Development	50	PSY 202	3	GOAL 5
Info Systems & Computer Apps	50	Elective	3	
Intro to Educational Psychology	50	Elective	3	
Intro to Psychology	50	PSY 113	3	GOAL 5
Intro to Business Law	50	Elective	3	
Intro Sociology	50	SOC 110	3	GOAL 5
Pre-calculus	50	MATH 142	3	GOAL 4
Principles of Accounting	50	Elective	6	
Principles of Macroeconomics	50	ECON 204	3	GOAL 5
Principles of Management	50	MGMT 260 (was MGMT 360)	3	
Principles of Marketing	50	MKTG 270 (was MKTG 310)	3	
Principles of Microeconomics	50	ECON 202	3	GOAL 5
Social Sciences & History	50	Elective	6	GOAL 5
Spanish Level 1	50	SPAN 101 & SPAN 102	6	GOAL 8
Spanish Level 2	63	SPAN 101, SPAN 102, SPAN 201, & SPAN 202	14	GOAL 8
Western Civilization I	50	Elective	4	GOAL 5
Western Civilization II	50	Elective	4	GOAL 5

### Dantes (DSST) Examinations

MSUM recognizes the DSST (Dantes) examination, which was originally designed for the military as a way to provide individuals an opportunity to obtain college level credit for what they have learned in nontraditional ways. Now available for civilian use, the DSST Test Control Officer (TCO) administers the exams on more than 560 military installations and official DSST test centers. The main users of the exams include adult education programs, U.S. Department of Defense, and two- and four-year colleges and universities.

In accordance with Minnesota State System policy, students must receive a minimum score on the examinations to qualify for possible awarding of credit and advanced placement, which is determined by the appropriate academic department on campus. If MSUM does not have an equivalent course, free elective credit may be awarded. Credit earned through DSST may not be used to satisfy residence-credit requirements for graduation.

To receive this credit, students must have an official score report sent to MSUM. The policies and procedures concerning the awarding of this credit may be found on the [Registrar's Office page](#). While every effort is made to keep this information up-to-date, scores and equivalencies may be subject to change.

<b>DSST Examination</b>	<b>Accepted Score</b>	<b>Equivalent MSUM Course</b>	<b>Credit Hours</b>	<b>LASC Goal(s)</b>
A History of the Vietnam War	400	Elective	3	
Art of the Western World	400	Elective	3	GOAL 6
Astronomy	400	AST 102	3	GOAL 3
Business Ethics and Society	400	Elective	3	
Business Mathematics	400	Elective	3	
Civil War and Reconstruction	400	Elective	3	GOAL 5
Computing Information & Technology	400	Elective	3	
Criminal Justice	400	Elective	3	
Environment and Humanity	400	Elective	3	GOAL 10
Ethics in America	400	Elective	3	GOAL 9
Foundations of Education	400	Elective	3	
Fundamentals of College Algebra	400	MATH 127	3	GOAL 4
Fundamentals of Counseling	400	Elective	3	
Fundamentals of Cybersecurity	400	Elective	3	
General Anthropology	400	Elective	3	
Health & Human Development	400	Elective	3	
Human Resources Management	400	Elective	3	
Human/Cultural Geography	400	Elective	3	GOAL 8
Intro to Business	400	Elective	3	
Intro to Law Enforcement	400	Elective	3	
Intro to World Religions	400	Elective	3	GOAL 8
Lifespan Development Psychology	400	Elective	3	
Management Information Systems	400	Elective	3	
Money and Banking	400	Elective	3	
Organizational Behavior	400	Elective	3	
Personal Finance	400	Elective	3	
Physical Geology	400	Elective	3	
Principles of Finance	400	Elective	3	
Principles of Physical Science I	400	PSCI 170	3	GOAL 3
Principles of Public Speaking	400	COMM 100	3	GOAL 1A
Principles of Supervision	400	Elective	3	

Principles of Statistics	400	Elective	3	GOAL 4
History of the Soviet Union	400	Elective	3	GOAL 8
Substance Abuse	400	Elective	3	
Technical Writing	400	Elective	3	

### **Military Training or Service Credit**

MSUM uses the American Council on Education's (ACE) “*A Guide to the Evaluation of Educational Experiences in the Armed Services*” to evaluate military learning. ACE translates military courses and occupations into academic credit, provides guidelines to interpret and recommend credit for formal service-school courses, and demonstrates proficiency in military occupations and college-level tests.

**Credit for Army training** may be obtained by requesting an official transcript from the Army/American Council on Education Registry System be sent to the Registrar's Office.

**Credit for Sailor and Marine training** may be obtained by requesting an official transcript from the Sailor/Marine American Council on Education Registry Transcript (SMART) be sent directly to the Records Office. Service members must have separated or retired from active duty on or after October 1, 1999.

**Credit for Air Force training** may be obtained by submitting a request to the Community College of the Air Force or go to your nearest Air Force base education office. Service members with credits/training for the Army pre-1981 and Sailors/Marines pre-1999 must request a DD295 and submit it for your college credit award review. Students should discuss the possibility of such credit with the MSUM Registrar.

For more information go to the following websites:

[MnSCU Resources for Veterans and Service Member](#)

[American Council on Education \(ACE\)](#)

[Community College of the Air Force](#)

## **Honors**

### **Academic Honors**

#### **Dean's List**

The Dean's list, published at the close of the fall and spring semesters, includes all students who are in a degree seeking status and have maintained a GPA of at least 3.25 for that semester while completing a minimum of 12 graded credits.

#### **Graduation Honors**

Students who complete at least 60 credits at MSUM and are candidates for baccalaureate degrees may graduate with the following honors:

- Cum Laude, representing a cumulative GPA of 3.4 or better;
- Magna Cum Laude, 3.6 or better; and
- Summa Cum Laude, 3.8 or better.

Such honors are computed only from the cumulative GPA at Minnesota State University Moorhead. Examination credits, AP, IB, and/or CLEP credits may not be counted toward the 60 credit total. Such honors will only be granted with the initial MSUM baccalaureate degree. Subsequent completion of additional majors or degrees will not result in the granting of additional honors citations. Transfer students who have enrolled for MSUM courses under the Tri-College University course exchange program may apply such MSUM courses to fulfill requirements for graduation with honors. Some departments of study may award departmental honors to students who meet the requirements established by the departments.

## **Graduation Requirements**

### **Associate Degree**

Minnesota State University Moorhead offers the two-year Associate in Arts (A.A.) degree in Liberal Arts. The degree requires:

- At least 60 semester credits, including at least 22 credits in courses taught by faculty awarding the degree (MSUM courses).
- A GPA of at least 2.00 in all MSUM courses applied to Liberal Arts and Sciences Curriculum (LASC), a 2.00 GPA in all courses applied to the A.A. degree, and a 2.00 in all courses taken at MSUM.
- Students who earn the A.A. degree must complete the LASC requirements of 14 courses minimum (42 credits minimum) that includes English 101 (or an approved alternative) and two additional writing intensive (W) courses.
- Students who are admitted to and complete the associate degree and who decide to continue with a baccalaureate program, may do so by meeting all additional requirements for the bachelor's degree, including the restriction against using more than two LASC courses from the student's major rubric to fulfill the LASC requirements.
- Completion of the application for graduation, with the advisor signature, and submission to the Registrar's Office.

### **Bachelor's Degree**

- At least 120 credits are required for all baccalaureate degrees. At least 40 semester hours of upper division courses (300 / 400 level) are required.
- Accumulation of 120 credits alone does not result in a degree. Credits must be earned as part of a baccalaureate program approved by the Board of Trustees of the Minnesota State Colleges and Universities system. Students are responsible for making certain their coursework fulfills requirements for a major in their designated degree.
- Candidates must have a GPA of at least 2.0 for all credits applied to the degree program. Students should check with the major department to find out specific graduation GPA requirements.
- Freshmen and transfer students who have not completed an approved general education curriculum will satisfy the University's general education requirement by completing the requirements of the Liberal Arts and Sciences Curriculum (LASC). Completion of LASC requires a minimum of 14 courses (42 credits minimum) with a cumulative average GPA of at least 2.0 for all courses applied to the requirement. No more than two LASC courses from the student's major rubric may be applied to the LASC requirements. Transfer students must have an average GPA of at least 2.0 for all courses applied to LASC.
- All students entering with less than 32 transferrable credits must complete five writing intensive (W) courses at MSUM. Refer to the Registrar's Office webpage for a list of approved courses.

- ENGL 101 (or an approved alternative).
  - One 300/400 level writing intensive course designated by the student's major.
  - One writing intensive course in LASC.
  - Two writing intensive courses at the 200-level or higher, only one of which may hold the rubric of the student's major.
- All students entering with 32 or more transferable credits must complete two writing intensive courses at MSUM:
    - One 300/400 level writing intensive course designated by the major.
    - One writing intensive course at the 200-level or higher.

***If a student has multiple majors, they must fulfill the university writing-intensive course requirements as well as the upper level writing requirement of each major.***

- All students entering with less than 12 transferrable credits must complete a freshmen seminar course.
- The degree program must include at least one major with a GPA of 2.0 or above. Certain majors may specify a higher GPA.
- No minor is required, but a GPA of at least 2.0 must be attained in any minor presented for graduation.
- Candidates must be enrolled as a resident student for at least 30 credits taught by the faculty awarding the degree (MSUM courses), and eight of the last twelve credits must be awarded by MSUM. At least twelve credits must be earned from the MSUM department which awards the major.
- No graduate credits may be applied to an undergraduate degree.
- An application for graduation must be submitted to the Registrar's Office prior to the semester in which candidates expect to complete graduation requirements. Students must secure the approval of each major advisor and department chairperson before submitting the application for graduation. Candidates for graduation must have official transcripts from all previous post-secondary institutions on file in the Registrar's Office. No student will be eligible for graduation while in special or non-degree status.
- Candidates for graduation with a teaching major shall fulfill all teacher licensure requirements.

### **Multiple Majors and Multiple Degrees**

Students completing two or more majors with different degree designations will be awarded the more appropriate degree, except that the B.S. degree shall be given if one major is in a field of professional teaching.

Students who seek more than one baccalaureate degree (different designation, i.e. B.A. and B.S.) will be required to complete at least 30 credits beyond the minimum of 120 or 128 credits applied to the first degree. Students who hold a previous baccalaureate degree from Minnesota State University Moorhead or from another institution whose degree is recognized by MSUM may earn an additional bachelor's degree (degree name must be different than the initial degree, i.e. B.A. and B.S.) by:

- Completing at least 30 resident credits at MSUM;
- Meeting all MSUM course requirements for the degree program, including at least six credits from the MSUM department awarding the degree and including an approved major and teacher education requirements for any teaching major; and

- Maintaining at least a “C” average in all studies at MSUM.

Students with a previous Minnesota State University Moorhead degree may add another major or minor by completing any additional requirements as certified to the Registrar by the department offering the major or minor and by the education department in the case of any teaching major.

Students completing two majors must meet departmental requirement for each major.

### **Four-Year Graduation Guarantee**

Minnesota State University Moorhead guarantees that all undergraduate students wishing to graduate in four years will be provided necessary courses as required by the University in the student’s selected major field of study. Any required courses needed beyond four years will be provided to the student tuition-free. See the Dean of the College for more information.

#### **Conditions:**

The graduation guarantee is only effective if the following conditions are met:

- All fall semester freshmen wishing to participate in the graduation guarantee program must complete the guarantee application form and officially declare a major before the drop deadline of fall semester.
- All participating students must be qualified to begin without remedial courses as determined by the department and the university.
- All participating students must register for classes each semester and have their class schedules approved by their official departmental advisor.
- All participating students must meet any program GPA or grade requirements.
- All participating students must successfully complete an average course load of 16 credits, or 15 credits for B.A., each semester (32 credits, or 30 credits for B.A./year).
- Participating students selecting a major requiring a minor must choose the minor no later than the end of their first year.
- Any courses failed or repeated will void the guarantee.
- Any change in major, options, or minor will void the guarantee.
- Required internships and research projects are beyond the scope of the guarantee (except for chemistry research).

### **Satisfactory Academic Progress**

This policy applies to all undergraduate students admitted to Minnesota State University Moorhead. This policy is specific to academic standing. Financial Aid has different standards that are monitored separately. The university requires students to make and maintain satisfactory academic progress. This means there are cumulative GPA thresholds and a percent of credit completion that students must achieve.

This policy is implemented as mandated by Minnesota State Colleges and Universities Board Policy 2.9.

#### **Responsibility and Notice of Academic Standing**

Students are responsible for checking on their academic and hold status each semester. Students can determine their academic status by monitoring the "Holds" section of the online web registration program, or by comparing their own progress to the policy standards.



Students who are placed on warning, probation and suspension are notified by email from the Academic Support Center. The email is sent to the student's university-assigned email address. Students are responsible for monitoring their official university email for messages.

### **GPA and Percent Completion**

Warning, probation and suspension are determined after the grading period at the end of each semester, including summer. In order to remain in good academic standing, undergraduate students must meet the GPA and percent completion requirements listed below. Students who fall below the standards will be placed on status based on the guidelines below.

Only MSUM courses (numbered 100 and above) are computed in the GPA. Accepted transfer credits count toward the total number of attempted credits, but transfer grades do not count in the student's MSUM GPA. To remain in good academic standing the requirements are:

- At 0 to 29 total attempted credits, a student must have a cumulative GPA of 1.8 or higher.
- At 30 to 59 total attempted credits, a student must have a cumulative GPA of 1.9 or higher.
- At 60 or more attempted credits, a student must have a cumulative GPA of 2.0 or higher.

(A GPA calculator is available on the Academic Support Center website)

- All students must complete 67% of the sum of all MSUM credits attempted plus all transfer credits accepted.
- MSUM credits attempted include all MSUM courses on a student's official record, including withdrawals, repeated courses, and grades of incomplete.
- Courses taken for audit are not counted as credits attempted or earned for Satisfactory Academic Progress.
- MSUM withdrawals, grades of F, FN, NC, incompletes, and missing grades count against percent completion because they result in zero credits earned for that course.
- Transfer credits accepted and earned credits listed on the MSUM transcript are included in the percent completion calculation as attempted credits.
- Percent completion is calculated by dividing the number of earned credits by the sum of MSUM attempted credits plus transfer credits accepted.

### **Academic Warning/Probation/Suspension Holds**

Students who are not in good academic standing during spring semester will not be allowed to enroll in any summer sessions until their academic status has been determined from spring semester.

### **Good Standing**

Students whose cumulative GPA and completion rate meet the minimum cumulative standards are considered in good standing.

### **Academic Warning**

Students who are in good standing at the beginning of the term but fall below the minimum cumulative GPA or cumulative completion rate at the end of the term will be placed on warning. Students on warning will be allowed to enroll for the next semester, with the exception of summer term. Students on warning may not enroll in summer courses that begin prior to June 1st.

Students on warning at the beginning of a term who do not meet the minimum cumulative GPA and/or cumulative completion rate at the end of the term will be suspended.

Students placed on academic warning are considered in good academic standing for extracurricular purposes.

### **Suspension**

Students who are suspended for the first time may not return to MSUM for one semester (not including summer term). Second and subsequent suspensions last for one calendar year.

Students who are suspended may appeal their status to the Financial Aid and Academic Suspension Appeals Committee. Guidelines on this process are outlined within the Satisfactory Academic Progress Procedures which can be found on the Academic Support Center website. This appeal should be done as soon as the student's grades are posted and must be submitted by the deadline set each semester by the Academic Support Center.

Students who do not submit an appeal by the deadline will have their registration cancelled from subsequent semester classes.

### **Probation**

If a student's suspension appeal is granted, they will be placed on probation and will be given minimum semester standards that must be met.

Students who are readmitted after academic suspension will be placed on academic probation. They will be given minimum semester standards that must be met.

Students on probation at the beginning of a term who do not meet the minimum cumulative standards will be allowed to enroll for the next semester if they have met the minimum semester standards, with the exception of summer term. Students on probation may not enroll in summer courses that begin prior to June 1st.

### **Procedure**

The Satisfactory Academic Progress Procedure implements this policy. The Satisfactory Academic Progress Procedure defines the actions that the university will take to intervene with the students who fall below the standards to remain in good academic standing, consistent with Minnesota State System Board Policy 2.9.

## **Course Placement Testing Policy**

### **Exemption from Testing**

Students who present current ACT sub scores will be exempt from testing. The ACT sub scores will be used for course placement for college-level courses. Students without ACT scores, or with ACT scores that signify the student is not ready for college-level work, must take the Accuplacer tests.

### **English Placement Policy**

Undergraduate students seeking enrollment in ENGL 101 must demonstrate readiness to succeed in the course. Students will be eligible to enroll in ENGL 101 if they have earned:

- An ACT English sub-score of 18 or above
- An SAT verbal score of 450 or above

Undergraduate students with ACT English sub-scores of 26 or higher (SAT reading score of 600 or higher) may opt to enroll in ENGL 201 instead of ENGL 101. ENGL 201 may be used to fulfill Liberal Arts and Sciences Curriculum (LASC) Goal Area 1B for students who choose this option.

- In order to be considered valid for placement purposes, an ACT/SAT score must have been earned within three years from the start of the class.
- An ACT English sub-score of 18-20 (SAT verbal sub-score of 450 to 509) will place students in a small class size version of ENGL 101. Students who wish to enroll in a large enrollment section of ENGL 101 may take the Accuplacer Reading Comprehension and Sentence Skills exam. Students scoring 86 or above on reading comprehension and 91 or above on sentence skills may register for a large enrollment ENGL 101.
- An ACT English sub-score of 17 or below (SAT verbal sub-score below 450) requires the Accuplacer Reading Comprehension and Sentence Skills tests for placement in ENGL 101. Accuplacer scores are valid for three years from the start of the class. A score of 78 or above on the reading comprehension test and 86 or above on the sentence skills test will place students in a small class size version of ENGL 101. Scores below either of these will place the student in ENGL 099.
- A student must pass ENGL 099 with a C- or better before enrolling in ENGL 101.
- The English placement policy will be reviewed by the University Policy Committee every two years.

### **Math Placement Policy**

Undergraduate students seeking enrollment in a mathematics course must demonstrate readiness to succeed. Undergraduate students with the ACT and corresponding SAT Math sub-scores as outlined below may choose to start in the listed MATH courses. Students may also choose to enroll in courses below the top level they qualify for. Students are encouraged to meet with an advisor in their department or in the math department to ensure the course they register for is appropriate for their chosen major:

- An ACT Math sub-score of 24 or above (SAT Math sub-score of 560 or above) and prerequisite knowledge of trigonometry may enroll in MATH 261.
- An ACT Math sub-score of 24 or above (SAT Math sub-score of 560 or above) may enroll in MATH 142, MATH 143, MATH 210, MATH 229 or MATH 234.
- An ACT Math sub-score of 23 or above (SAT Math sub-score of 540 or above) may enroll in MATH 227.
- An ACT Math sub-score of 22 or above (SAT Math sub-score of 520 or above) may enroll in MATH 127.
- An ACT Math sub-score of 19 or above (SAT Math sub-score of 460 or above) may enroll in MATH 099, MATH 105, or MATH 110.
- An ACT Math sub-score of 18 or below (SAT Math sub-score of below 460) must take the Accuplacer for placement.
  - An Accuplacer Arithmetic score of 57 or above or an Accuplacer Arithmetic and Elementary Algebra combined score of 100 or above may enroll in MATH 090 or MATH 095.
  - An Accuplacer Elementary Algebra score of 76 or above may enroll in MATH 099, MATH 105, or MATH 110.
  - An Accuplacer Intermediate Algebra score of 60 or above may enroll in MATH 127 or MATH 227.
  - An Accuplacer College Level Mathematics score of 50 or above may enroll in MATH 142, MATH 143, MATH 229, or MATH 234.
  - An Accuplacer College Level Mathematics score of 50 or above may enroll in MATH 261 if accompanied by prerequisite knowledge of trigonometry.
  - A new entering freshman who does not attain any of the above scores will be automatically enrolled in MATH 090A for their first semester.

**ACT, SAT, and Accuplacer scores must have been earned within two years from the start of the class.**

The Math placement criteria given above will be reviewed by the Math Department Course Placement Committee every two years to ensure placement levels are correlated to recent student success data.

### **Course completion or in-process exemption from testing**

Students who have completed their math requirement at another institution will be exempt from testing. Students enrolled in courses leading up to their math requirement completion will also be exempt from testing and be able to register for the next course in the sequence. Students will be able to register based on “good faith” that they are passing the required prior courses. Any student who does not pass the prior course will have their registration dropped once grades are known and will not be allowed to remain in the course.

### **Appeals Process**

Students who do not believe they have been appropriately placed with their ACT sub score, may take the Accuplacer to determine placement. Students who do not feel the Accuplacer has given appropriate placement may re-take the Accuplacer to attempt a higher score.

## **Common Undergraduate Degree Requirements**

### **Liberal Arts and Sciences Curriculum (LASC)**

Liberal Arts and Sciences Curriculum (LASC) provides a broad foundation of skills, information and knowledge that goes beyond your chosen academic field. It will foster your ability to communicate effectively, to think critically and to problem solve. You will gain knowledge, skills and attitudes central to living in and contributing to a diverse world and the perspective to understand and appreciate the world's nations and peoples from the ethical dimensions of personal and political decisions to the challenges of responding to environmental variables.

While the LASC is one component of a baccalaureate degree, the other being your major, courses may also apply to a minor or emphasis as well as being used as "general electives."  
Students should consult early and often with their academic advisor to ensure effective planning.

### **Goal Areas**

**Goal 1A: Oral Communication:** To develop writers and speakers who use the English language effectively and who read, write, speak and listen critically. As a base, all students should complete introductory communication requirements early in their collegiate studies. Writing competency is an ongoing process to be reinforced through writing intensive courses and writing across the curriculum. Speaking and listening skills need reinforcement through multiple opportunities for interpersonal communication, public speaking and discussion.

**Goal 1B: Written Communication:** To develop writers and speakers who use the English language effectively and who read, write, speak and listen critically. As a base, all students should complete introductory communication requirements early in their collegiate studies. Writing competency is an ongoing process to be reinforced through writing intensive courses and writing across the curriculum. Speaking and listening skills need reinforcement through multiple opportunities for interpersonal communication, public speaking and discussion.

**Goal 2: Critical Thinking:** To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought. Critical thinking will be taught and used throughout the general education

curriculum in order to develop students' awareness of their own thinking and problem-solving procedures. To integrate new skills into their customary ways of thinking, students must be actively engaged in practicing thinking skills and applying them to open-ended problems.

**Goal 3: Natural Sciences:** To improve students' understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena. As a basis for lifelong learning, students need to know the vocabulary of science and to realize that while a set of principles has been developed through the work of previous scientists, ongoing scientific inquiry and new knowledge will bring changes in some of the ways scientists view the world. By studying the problems that engage today's scientists, students learn to appreciate the importance of science in their lives and to understand the value of a scientific perspective. Students should be encouraged to study both the biological and physical sciences.

**Goal 4: Mathematics / Logical Reasoning:** To increase students' knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply mathematics, logic, and/or statistics to help them make decisions in their lives and careers. Minnesota's public higher education systems have agreed that developmental mathematics includes the first three years of a high school mathematics sequence through intermediate algebra.

**Goal 5: History and the Social and Behavioral Sciences:** To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity.

**Goal 6: The Humanities and the Fine Arts:** To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the fine arts, students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities.

**Goal 7: Human Diversity:** To increase students' understanding of individual and group differences (e.g. race, gender, class) and their knowledge of the traditions and values of various groups in the United States. Students should be able to evaluate the United States' historical and contemporary responses to group differences.

**Goal 8: Global Perspective:** To increase students' understanding of the growing interdependence of nations and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic and political experiences.

**Goal 9: Ethical and Civic Responsibility:** To develop students' capacity to identify, discuss, and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship. While there are diverse views of social justice or the common good in a pluralistic society, students should learn that responsible citizenship requires them to develop skills to understand their own and others' positions, be part of the free exchange of ideas, and function as public-minded citizens.

**Goal 10: People and The Environment:** To improve students' understanding of today's complex environmental challenges. Students will examine the inter-relatedness of human society and the natural environment. Knowledge of both bio-physical principles and socio-cultural systems is the foundation for integrative and critical thinking about environmental issues.

**Goal 11: Information Literacy:** To foster researchers who have the ability to locate and investigate, organize, critically evaluate, and effectively synthesize information. Information literacy will be interwoven throughout the general education curriculum in order to develop students' academic integrity regarding their research.

### **Requirements**

LASC is a minimum of 14 courses (42 credits minimum) and matches with the goal areas of the Minnesota Transfer Curriculum with the exception of Goal Areas 11: Information Literacy. This goal area is embedded in the curriculum of Goal Areas 1A through 10 and is satisfied through the completion of the other goal areas. A minimum of a 2.0 GPA is required in all courses used to fulfill LASC requirements, including transfer courses. A course from Goal Areas 3, 5, or 6 may also satisfy Goal Areas 7, 8, 9, or 10. Completion of approved course fulfills both goal areas, but the credit may not be double counted. LASC courses must be a minimum of 3 credits and may have pre-requisites.

**Goal 1A: Oral Communication**– Complete one course.

**Goal 1B: Written Communication**– Complete one course.

**Goal 2: Critical Thinking** – Complete a minimum of one course.

**Goal 3: Natural Sciences** – Complete a minimum of two courses from two different rubrics, at least one course must include a traditional lab experience.

**Goal 4: Mathematics / Logical Reasoning** – Complete a minimum of one course.

**Goal 5: History and the Social and Behavioral Sciences** – Complete a minimum of two courses with different disciplinary rubrics.

**Goal 6: The Humanities and Fine Arts** – Complete a minimum of two courses with different disciplinary rubrics.

**Goal 7: Human Diversity** – Complete a minimum of one course.

**Goal 8: Global Perspective** – Complete a minimum of one course.

**Goal 9: Ethical and Civic Responsibility** – Complete a minimum of one course.

**Goal 10: People and the Environment** – Complete a minimum of one course.

**Goal 11: Information Literacy** – This goal is fulfilled automatically when all of the goal areas are completed.

Only courses currently approved for LASC credit may be counted toward completion of the 42 minimum credits required. A complete list of all currently approved courses is available online [HERE](#).

Courses taken for Pass/Fail grades may not be applied to LASC. In addition to the graduation requirement of a GPA of 2.0 in all MSUM courses, an overall cumulative 2.0 GPA is required in LASC. Certain degree programs may require higher LASC GPAs. Check with the department for more information.

### **Writing Intensive Requirements**

All students entering with less than 32 transferrable credits must complete five writing intensive (W) courses at MSUM:

- English 101 (or an approved alternative)
- One writing intensive course in the Liberal Arts and Sciences Curriculum (LASC)
- One 300- or 400-level writing intensive course designated by the student's major

- Two writing intensive courses at the 200-level or higher, only one of which may hold the rubric of the student's major

If a student has multiple majors, the student must fulfill the university writing intensive course requirements as well as the upper-level writing requirement of each major.

Students entering with 32 or more transferable credits must complete two writing intensive courses at MSUM:

- One 300- or 400-level writing intensive course designated by the student's major
- One writing intensive course at the 200-level or higher

If a student has multiple majors, the student must fulfill the university writing intensive course requirements as well as the upper-level writing requirement of each major.

A complete list of all currently approved courses is available online [HERE](#).

### **Minnesota Transfer Curriculum**

The Minnesota Transfer Curriculum (MnTC) was created by mutual agreement of Minnesota's public higher education institutions to aid in transfer among all public colleges and universities in the state. Students completing the specified transfer curriculum at one Minnesota institution will be deemed to have satisfied the general education requirements of the latter institution.

Students who transfer to MSUM with a partially completed MnTC are not required to repeat any goal areas they have already fulfilled, but must complete the remaining requirements of MSUM's Liberal Arts and Sciences Curriculum. A 2.0 MnTC GPA is required for recognition of a student's completion of the entire MnTC with or without completing an associate degree.

In order to complete the MnTC at MSUM a student must complete the following requirements:

- A 2.0 MnTC GPA is required for recognition of a student's completion of the entire Minnesota Transfer Curriculum.
- A minimum of 14 courses (42 semester credits) must be completed in the following goal areas.

**Goal 1A: Oral Communication**– Complete one course.

**Goal 1B: Written Communication**– Complete one course.

**Goal 2: Critical Thinking** – Complete a minimum of one course.

**Goal 3: Natural Sciences** – Complete a minimum of two courses from two different rubrics, at least one course must include a traditional lab experience.

**Goal 4: Mathematics / Logical Reasoning** – Complete a minimum of one course.

**Goal 5: History and the Social and Behavioral Sciences** – Complete a minimum of two courses with different disciplinary rubrics.

**Goal 6: The Humanities and Fine Arts** – Complete a minimum of two courses with different disciplinary rubrics.

**Goal 7: Human Diversity** – Complete a minimum of one course.

**Goal 8: Global Perspective** – Complete a minimum of one course.

**Goal 9: Ethical and Civic Responsibility** – Complete a minimum of one course.

**Goal 10: People and the Environment** – Complete a minimum of one course.

### **Minnesota Transfer Curriculum Two-Year Colleges**

Transfer students who have completed an Associate in Arts degree at a regionally accredited college or have completed the MnTC as prescribed by that institution, will be deemed to have met the LASC requirement at MSUM.

Transfer credits may not be applied to meet an area requirement (LASC, major, or minor) unless they also meet the corresponding GPA requirement for the academic area.

All baccalaureate degrees require at least 40 credits of the graduation credits to be at the upper division (300-400) level.

MSUM will accept in transfer, for full credit, college-parallel general education courses offered by institutions with regional accreditation to provide transfer-level general education courses leading to the following degrees: associate degrees in arts, sciences, applied sciences, and the baccalaureate degree.

MSUM will accept for transfer, as lower-division electives, a maximum of 16 semester credits of vocational or technical courses offered by technical colleges. Specific requirements in a student's major or minor field of study may be waived upon evaluation of vocational or technical courses judged by MSUM faculty to be comparable or equivalent to courses offered by MSUM. Any credit granted upon review will be in addition to the total of 16 credits of lower division electives.

## Curriculum Information

**This is a listing of available degree programs here at MSUM.**

The four-year degrees available from Minnesota State University Moorhead (MSUM) include the Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts, Bachelor of Science in Nursing, Bachelor of Music, and the Bachelor of Social Work. Each requires the satisfactory completion of 120 or 128 credits of college courses and includes 42 credits in the Liberal Arts and Sciences Curriculum (LASC), from 32-64 credits in a major area, and the remainder in electives. While no minor is required, students may choose from more than 60 possible minor programs. Information about the LASC requirements may be found in the *Common Undergraduate Degree Requirements* section of the **Bulletin** and requirements for degrees are listed in the *Majors, Minors, and Certificates* section.

## Multiple Majors and Multiple Degree

Students completing two or more majors with different degree designations will be awarded the more appropriate degree, except that the B.S. degree shall be given if one major is in a field of professional teaching.

Students who seek more than one baccalaureate degree (different designation, i.e. B.A. and B.S.) will be required to complete at least 30 credits beyond the minimum of 120 or 128 credits applied to the first degree. Students who hold a previous baccalaureate degree from MSUM or from another institution whose degree is recognized by MSUM may earn an additional bachelor's degree (degree name must be different than the initial degree, i.e. B.A. and B.S.) by:

- Completing at least 30 resident credits at MSUM;
- Meeting all MSUM course requirements for the degree program, including at least six credits from the MSUM department awarding the degree and including an approved major and teacher education requirements for any teaching major; and
- Maintaining at least a 2.0 GPA in all studies at MSUM.

Students with a previous MSUM degree may add another major or minor by completing any additional requirements as certified to the Record's Office by the department offering the major or minor and by the education department in the case of any teaching major.

Students completing two majors must meet departmental requirements for each major.



### **Minors through Tri-College University Exchange**

The Tri-College University commissioners have agreed that students completing minors on one of the other campuses should be given recognition for this accomplishment on their graduation transcripts. Thus, a MSUM student could complete a minor in, for example, agronomy or horticulture at one of the other TCU schools and, upon graduation, that student's transcript would so indicate. Students should complete the TCU minor approval form and secure signatures from the university/college granting the minor. Additional information may be found on the [Tri-college page](#).

### **Teaching Majors and Minors**

Requirements for teaching major programs are listed under the respective departments in this catalog or can be found at <http://www.mnstate.edu/education/>.

### **University Studies Major**

Students who wish to develop a multidisciplinary major built around a chosen theme or who wish to complete a generalist degree or who have completed most but not all of the requirements of a major or have been unable to complete a degree in a timely major may wish to complete a generalist degree, the Bachelor of Science in University Studies. Information on the University Studies degree can be found at <http://www.mnstate.edu/asc/universitystudies.aspx>.

### **Certificate Programs**

Certificates are awarded for successful completion of a *specialized academic program of study which certifies specific* knowledge and/or professional skills in a specialized area of knowledge or practice.

### **Advising in Pre-Professional Areas**

A number of professions, particularly those in the health sciences and legal areas, require advanced specialized training beyond the baccalaureate. Students interested in pursuing these careers must be properly advised about their various options for coursework and degree completion at MSUM so they will be best prepared for more advanced degree work in these fields. For example, MSUM has a Pre-professional committee of faculty who provide advising and support for students at all stages of their interest in and application to medical school. MSUM faculty also have expertise in advising students as they prepare for post-graduate work.

### **Associate Degree**

MSUM offers the two-year Associate in Arts (A.A.). This degree requires completion of the Liberal Arts and Sciences Curriculum and Writing-Intensive requirements, plus electives to fulfill the 60 credit degree requirement. The AA degree is designed so students may continue to study for a baccalaureate degree should educational plans change.

### **Engineering Dual Degree Program**

Minnesota State University Moorhead's Engineering Dual Degree Program gives students a distinctly competitive advantage: two degrees from two institutions in five years. The Dual Degree Program allows students to enroll in a prescribed set of courses at MSUM and after three years, transfer to the Institute of Technology at the University of Minnesota. Upon completion of the credits to earn the B.S. Degree in Engineering at the University of Minnesota, students would also be granted a B.S. Degree in Mathematics, Physics, or Chemistry at MSUM. For more information, go to <https://www.mnstate.edu/chemistry/dualengineeringdegree.aspx>.

While the engineering dual degree is a preferred track for students considering a career in one of many engineering fields, our pre-engineering students also successfully transfer to other institutions. MSUM has a similar arrangement with the University of North Dakota.

### **2+2 Technical Transfer Program**

The Construction and Operations Management Department offers a 2+2 transfer program for students earning an AS or AAS degree in a technical field. This B.S. degree program is designed to allow most transfer students in Operations Management to graduate with two additional years of study. Students complete the Operations Management core, plus courses to satisfy the Liberal Arts and Sciences Curriculum and graduation requirements. They then earn a B.S. Degree in Operations Management. MSUM's 2+2 Operations Management program was the first such program accredited by the National Association of Industrial Technology. Articulation agreements are in place for nearly 400 technical programs at most of the technical, community, and co-located colleges in the three-state area.

### **Teaching License Programs**

Many enroll at MSUM in programs that will provide the academic requirements for Minnesota licensure in various fields of education. Upon completing one of these programs, students should apply for licensure through the School of Teaching and Learning. If the license program is combined with study for a postgraduate degree, students must meet admission requirements established by the Office of Graduate Studies. Questions should be directed to specific departments.

Those who hold baccalaureate degrees without a teaching license may earn a Bachelor of Science degree from MSUM or complete the academic requirements for licensure.

Minnesota licensure does not guarantee reciprocal licensure in other states. Therefore, students who intend to teach in other states should contact licensure boards in those states as early as possible to determine appropriate coursework for certification.

### **Honors Program**

**MacLean 374C, (218) 477-4104**

**Program Director:** Elizabeth Nawrot

The new MSUM Honors Program provides excellent teaching, mentorship, and long-term intellectual development. The program is built around three themes: explore, create, experience. Within a flexible framework, students are expected to explore different courses, lectures, and ideas that challenge the intellect; create with faculty mentors their own research or creative activities; and experience the breadth of university life by attending concerts, plays, exhibitions, special lectures, or to experience what the world has to offer by studying abroad.

### **Program Components and Definitions**

The main components of the Honors Program are the Honors Colloquium, three Honors Courses, the Honors Capstone, and eight Honors Encounters.

- The Honors Colloquium develops student's analytical, logical, and critical reading skills and it is structured to encourage open discussion of current issues, controversial ideas, and broadly interdisciplinary intellectual themes.
- The Honors Capstone enables the student to use and extend skills and abilities developed over the course of their experience, developing an intellectual and/or professional written project that demonstrates their accomplishments in the program.

- Honors Encounters are one-credit /pass/fail courses. Students can earn an Honors Encounters credit by attending any combination of at least three Honors Lectures, other lectures and performances or exhibitions as approved by the Honors Director or Honors Program Committee. Students will be expected to write a short report of each event attended. In addition, students could earn Honors Encounter credits by learning abroad, studying foreign languages beyond major requirements and carrying out independent research or creative activities beyond major requirements.

### **Entrance Requirements:**

Admission to the Honors Program is by automatic invitation for entering freshmen who have achieved an ACT score of 26 or greater (equivalent SAT) or who are in the top 25% of their high school graduating class and also earned a GPA of at least 3.6. New students who do not meet these requirements (as well as current or transfer students) may apply for the Honors Program by providing a personal statement outlining their academic and intellectual goals, a writing sample, and school transcripts.

## **University Studies**

**Academic Support Center Flora Frick 154**

**Contact: Janet Sundquist-Schenck 218-477-5949**

<http://www.mnstate.edu/asc/universitystudies.aspx>

The Bachelor of Science in University Studies is intended as an option for the following students:

- A student who wishes to complete a generalist degree, or
- A student who has completed most but not all of the requirements of a major or has been unable to complete a degree in a timely manner.

The major must include the following: 36 credits of a partial major program or rubric (no more than 30 credits from the areas of Accounting, Finance, Management, and Marketing may be included in the partial major program or rubric), 21 additional credits from a single different rubric or area of concentration, and a 2.0 GPA in both segments. This major may be declared as late as the semester prior to graduation, but not before the student has attained junior standing.

## **Anthropology & Earth Science**

**Anthropology and Earth Science Department**

**King Hall 103, (218) 477-4217**

**Chair:** Bruce Roberts

**Faculty:** Russell Colson, Rinita Dalan, Erik Gooding, David Kramar, George Holley, Karl Leonard, Paul Sando, Michael Michlovic (Emeritus)

*The Department of **Anthropology and Earth Science** offers majors in Anthropology, Earth Science Education and Geosciences. Minors are offered in Anthropology and Geosciences. Certificate is offered in Geographic Information Science.*

### **Anthropology**

The Anthropology major provides students with an opportunity to understand people in different cultures, places, and times. Students are introduced to the vast range of human cultures, and to the relationship between human beings, their culture, and their environment. At Minnesota State University Moorhead, the major includes an introduction to the four sub-fields of anthropology - cultural anthropology, archaeology, biological anthropology, and linguistics, along with a menu of specialized courses in cultural anthropology and archaeology. The major includes two emphases, or tracks. One is in archaeology, for students wishing to focus on the study of ancient cultures; and the other is in cultural anthropology, for those students interested in the study of contemporary cultures from a cross-cultural and global perspective.

A minor in Anthropology is also offered. The minor is comprised of the three introductory courses - Anthropology 110, 115, and 120 - one upper-level archaeology course, one upper-level cultural anthropology course, and two upper-level anthropology electives.

There are specialized learning experiences in the form of field and laboratory courses in archaeology, specialized training in geophysical prospection, cultural tours and field schools in ethnography. The field experiences are offered in summer sessions.

### **Geosciences**

The Geosciences major provides students with an opportunity to understand the earth, including processes that have shaped its past and those that will shape its future, and the relationships among place, landscape, climate, culture, economy, and people. Students can choose one of three emphases: geology, geoarchaeology, or geographical science.

Geology is for those students interested in understanding how the earth works presently and what has happened in earth's ancient past. Students who choose this track will focus on our environment and its processes, stories of earth's past, and the formation and extraction of natural resources of the earth. Geoarchaeology is for those students interested in understanding what geological evidence and reasoning reveal about past human cultures and activities on earth. Students who choose this track will focus on the geological, chemical, biological, and physical methods for interpreting artifacts, sediments, and environments important in understanding our human past.

Geographical Science is for those students interested in understanding the relationships among place, people, and environment. Specifically, this emphasis focuses on understanding why things occur where they do. Students who choose this track will focus on understanding the distribution of climate, cultures, and landscapes on earth, the reason for those distributions, and the way these interact with and affect humans and our economies. In addition, students will have the opportunity to gain knowledge in the application of Geographic Information Science (GIS) to solve spatial problems related to the real world.

A minor in Geosciences is also offered. Students should see an advisor concerning which geoscience courses fit their particular needs or interests.

The Certificate in Geographic Information Sciences provides a focused area of study and basic competency in the theory, technology, and application of Geographic Information Science. Upon completion of the GIS certificate, students will have a broad understanding of the foundations of GIS and spatial analysis, and know how to apply that knowledge to solve spatial problems. In addition to serving our current student population, the certificate program is also intended to serve recent or returning graduates who wish to acquire specialized training to meet current market demands for GIS professionals.

The **Earth Science Education** major is for those students interested in teaching earth science in grades 9-12, and meets the requirements for licensure in science (grades 5-8). Our Earth Science Education program is particularly strong in providing in-depth coverage of the wide range of earth Science subjects needed for Minnesota licensure, including physical geology, historical geology, meteorology, astronomy and planetary science, oceanography and interaction of people with the land.

### **B.A. Degree in Anthropology**

Anthropology is the study of humankind. It is comprised of four subfields – archaeology, biological/physical

anthropology, cultural anthropology, and linguistic anthropology. At Minnesota State University Moorhead, anthropology majors begin acquiring exposure to the subfields of the discipline through introductory-level courses. Students then select an emphasis either in archaeology – the study of past societies and cultures – or cultural anthropology – the study of contemporary cultures and societies.

The archaeology emphasis provides students with learning opportunities in classroom and lab settings as well as through fieldwork. In summer field schools students learn standard excavation methods and applied geoarchaeological and geophysical methods. The archaeology emphasis prepares students to further their education in graduate school or to embark on careers in cultural resource management or interpretation.

Students in the cultural anthropology emphasis develop a broad perspective on what it means to be human through courses dealing with diverse contemporary global issues. A Midwest ethnographic field school and East African cultural study tour offer real world learning experiences. Those interested in teaching at the college/university level go on to graduate school while others find employment in international and domestic businesses, NGOs, and human service agencies.

To receive the B.A. Degree in Anthropology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree, which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Understand the content of the discipline.
- Apply the concepts of anthropology.
- Understand research methods.
- Ability to use resources effectively.

#### Core Requirements (15 credits)

This core is required of all students who major in Anthropology, including both emphases in Cultural Anthropology and Archaeology.

ANTH 110 Introduction to Cultural Anthropology (3)

ANTH 115 Introduction to Archaeology (3)

ANTH 120 Introduction to Physical Anthropology (3)

ANTH 248 Ideas of Culture (3)

ANTH 492 Seminar in Anthropology (3)

#### Archaeology Emphasis

#### Program Requirements (21 credits)

Students in the Archaeology emphasis must take:

ANTH 217 Rise of Civilization (3)

ANTH 300 Contemporary Archaeology (3)

ANTH 350 Geoarchaeology (3)

Additionally, students in the Archaeology emphasis must also take:

- One archaeology area course, selecting from:  
ANTH 315: North American Archaeology (3) **or**  
ANTH 337: The Maya (3)

- At least six credits in applied archaeology courses, selecting from:  
 ANTH 301 Archaeological Prospection (3)  
 ANTH 450 Field Work in Anthropology (6)  
 ANTH 451 Archaeology Lab (3)  
 ANTH 455 Field Methods in Geoarchaeology (4)
- One upper level cultural anthropology course at the 300+ level, selecting from:  
 ANTH 306 Medical Anthropology (3)  
 ANTH 307 Ecological Anthropology (3)  
 ANTH 308 Migration and Human Adaptation (3)  
 ANTH 309 Indians of the Great Plains (3)  
 ANTH 311 American Indians and the Environment (3)  
 ANTH 312 Anthropology of Tourism (3)  
 ANTH 313 Understanding Contemporary Africa (3)  
 ANTH 314 American Indian World Views (3)  
 ANTH 316 Magic, Witchcraft and Belief (3)  
 ANTH 333 Anthropology of Music (3)  
 ANTH 360 Applied Ethnographic Methods (3)  
 ANTH 380 Traditional Cultures (3)

#### Restricted Electives (9 credits)

Students in the Archaeology Emphasis must select **at least 9 credits of electives in the ANTH rubric at the 200 level or above**. These courses may not be selected from those already used to fulfill requirements of the major or emphasis.

#### Cultural Anthropology Emphasis

##### Program Requirements (21 credits)

Students in the Cultural Anthropology emphasis must take:

ANTH 265 Language and Culture (3)  
 ANTH 360 Applied Ethnographic Methods (3)  
 ANTH 380 Traditional Cultures (3)

Additionally, students in the Cultural Anthropology emphasis must also take:

- One cultural anthropology area course, selecting from:  
 ANTH 202 American Indian Cultures (3)  
 ANTH 309 Indians of the Great Plains (3)  
 ANTH 313 Understanding Contemporary Africa (3)
- Two upper level applied cultural anthropology courses, selecting from:  
 ANTH 306 Medical Anthropology (3)  
 ANTH 307 Ecological Anthropology (3)  
 ANTH 308 Migration and Human Adaptation (3)  
 ANTH 311 American Indians and the Environment (3)  
 ANTH 312 Anthropology of Tourism (3)

- One upper level archaeology course at the 300+ level, selecting from:  
 ANTH 300 Contemporary Archaeology (3)  
 ANTH 301 Archaeological Prospection (3)  
 ANTH 315 North American Archaeology (3)  
 ANTH 337 The Maya (3)  
 ANTH 350 Geoarchaeology (3)  
 ANTH 450 Field Work in Anthropology (6)  
 ANTH 451 Archaeology Lab (3)  
 ANTH 455 Field Methods in Geoarchaeology (4)

#### Restricted Electives (9 credits)

Students in the Cultural Anthropology Emphasis **must select at least 9 credits of electives in the ANTH rubric at the 200 level or above.** These courses may not be selected from those already used to fulfill requirements of the major or emphasis.

### **B.S. Degree in Earth Science Education**

To receive the B.S. Degree in Earth Science Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or higher is required for graduation with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

#### Student Learning Outcomes

- Ability to apply concepts and principles of geosciences in understanding earth processes and how human activities and earth processes interact.
- Competency in laboratory and field skills and ability to conduct a scientific investigation.
- Ability to use and respond to literature and research in geosciences, including: use of library and research data, ability to interpret results of a research investigation, comprehension of key ideas and evidence, understanding of arguments, and ability to communicate arguments and ideas in written and oral form.

#### Core Requirements (68 credits)

Students must also fulfill all teacher licensure requirements which will add thirty-six credits to the major total. Completion of this major meets the requirements for Minnesota licensure in Science (Grades 5-8) and Earth Science (Grades 9-12).

GEOS 115 Physical Geology (4)  
 GEOS 116 Historical Geology (3)  
 GEOS 302 Mineralogy (3)  
 GEOS 303 Petrology (3)  
 GEOS 305 Oceanography (3)  
 GEOS 315 Sedimentology and Stratigraphy (3)  
 GEOS 330 Elementary Meteorology (3)  
 GEOS 340 Economic and Environmental Geology (3)  
 GEOS 360 Planetary Science (3)  
 GEOS 492 Senior Seminar (1)  
 BIOL 440 Middle School/Secondary Science Teaching Methods (3) **or**  
 CHEM 440 Secondary Science Teaching Methods (3)

**Total: 32 credits**

### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

### Related Requirements (28 credits)

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
CHEM 150 General Chemistry I (3)  
CHEM 150L General Chemistry Laboratory I (1)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry II Lab (1)  
MATH 261 Calculus I (4)  
PHYS 160 College Physics I with Lab (4)  
PHYS 161 College Physics II with Lab (4)

### Restricted Electives (3 credits)

Students must complete at least three credits from the courses listed below:

ANTH 120 Introduction to Physical Anthropology (3)  
AST 104 Stellar Astronomy (3)  
GEOS 117 Water, Land, and People (3)  
GEOS 117L Water, Land and People Lab (1)  
GEOS 301 Archaeological Prospection (3)  
GEOS 320 Economic Geography (3)  
GEOS 325 Reading Landscape: Ways of Seeing (3)  
GEOS 350 Geoarchaeology (3)  
GEOS 370 Structural Geology and Mapping (3)  
GEOS 390 Topics in Geosciences (1-3)  
GEOS 307 Introduction to GIS (3)  
GEOS 415 Reading Geochemical Fingerprints (3)  
GEOS 416 Paleontology (3)  
GEOS 417 Taphonomy and Paleoecology (3)  
GEOS 450 Field Geology (3)



## **B.S. Degree in Geosciences**

To receive the B.S. Degree in Geosciences, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Ability to apply concepts and principles of geosciences in understanding Earth processes or relationships of people to the Earth.
- Competency in laboratory and field skills and ability to conduct a scientific investigation.
- Ability to use and respond to literature and research in geosciences, including: use of library and research data, ability to interpret results of an investigation in science or social science research, comprehension of key ideas and evidence, understanding of arguments, and ability to communicate arguments and ideas in written and oral form.

### **Core Requirements**

Students in this major must complete a minimum of 120 credits for the B.S. degree and select coursework from one of the three emphases: Geology, Geographical Sciences, or Geoarchaeology.

### **Geographical Sciences Emphasis**

#### **Program Requirements ( 34 credits)**

ANTH 307 Ecological Anthropology (3)  
GEOS 205 Thinking Spatially (3)  
GEOS 207 GPS Field Techniques (3)  
GEOS 210 Cartography (3)  
GEOS 305 Oceanography (3)  
GEOS 307 Introduction to GIS (3)  
GEOS 310 United States and Canada (3)  
GEOS 320 Economic Geography (3)  
GEOS 325 Reading Landscape: Ways of Seeing (3)  
GEOS 330 Elementary Meteorology (3)  
GEOS 335 Environmental Geography and Conservation (3)  
GEOS 492 Senior Seminar (1)

#### **Restricted Electives (15 credits)**

Six to eight credits must be taken from GEOS 110, GEOS 111, GEOS 115 and GEOS 117. At least nine additional credits must be taken from the other listed courses in this area.

Students should consult with their advisor in the department to determine which elective courses are most appropriate for their interests and plans.

ANTH 202 American Indian Culture (3)  
ANTH 309 Indians of the Great Plains (3)  
ANTH 313 Understanding Contemporary Africa (3)  
GEOS 110 Introductory Physical Geography (3)  
GEOS 111 Cultures and Regions (3)  
GEOS 115 Physical Geology (4)  
GEOS 117 Water, Land, and People (3)

GEOS 117L Water, Land and People Lab (1)  
GEOS 235 Geography of Minnesota and North Dakota (3)  
GEOS 315 Sedimentology and Stratigraphy (3)  
GEOS 340 Economic and Environmental Geology (3)  
GEOS 350 Geoarchaeology (3)  
GEOS 370 Structural Geology and Mapping (3)  
GEOS 390 Topics in Geosciences (1-3)  
GEOS 407 Spatial Analysis (4)  
GEOS 410 Eastern Europe & Russia (3)  
GEOS 415 Reading Geochemical Fingerprints (3)  
ANTH 450 Field Work in Anthropology (6) **or**  
GEOS 450 Field Geology (3) **or**  
GEOS 455 Field Methods in Geoarchaeology (4)

### **Geology Emphasis**

#### **Program Requirements (35 credits)**

GEOS 115 Physical Geology (4)  
GEOS 116 Historical Geology (3)  
GEOS 301 Archaeological Prospection (3)  
GEOS 302 Mineralogy (3)  
GEOS 303 Petrology (3)  
GEOS 315 Sedimentology and Stratigraphy (3)  
GEOS 340 Economic and Environmental Geology (3)  
GEOS 370 Structural Geology and Mapping (3)  
GEOS 415 Reading Geochemical Fingerprints (3)  
GEOS 416 Paleontology (3)  
GEOS 450 Field Geology (3)  
GEOS 492 Senior Seminar (1)

#### **Related Requirements (19 credits)**

BIOL 115 Organismal Biology (4) **or**  
BIOL 305 General Botany (4)  
CHEM 150 General Chemistry I (3) **and**  
CHEM 150L General Chemistry Laboratory I (1)  
MATH 234 Introduction to Probability and Statistics (3) **or**  
BIOL 275 Quantitative Biology (4)  
MATH 261 Calculus I (4)  
PHYS 160 College Physics I with Lab (4) **or**  
PHYS 200 General Physics I with Lab (4)

#### **Restricted Electives (6 credits)**

Students must complete at least six credits selected from the listed courses.

GEOS 117 Water, Land, and People (3)  
GEOS 117L Water, Land and People Lab (1)  
GEOS 205 Thinking Spatially (3)  
GEOS 207 GPS Field Techniques (3)  
GEOS 210 Cartography (3)

GEOS 305 Oceanography (3)  
GEOS 307 Introduction to GIS (3)  
GEOS 320 Economic Geography (3)  
GEOS 330 Elementary Meteorology (3)  
GEOS 350 Geoarchaeology (3)  
GEOS 360 Planetary Science (3)  
GEOS 390 Topics in Geosciences (1-3)  
GEOS 397 Research in Geosciences (1-3)  
GEOS 407 Spatial Analysis (3)  
GEOS 417 Taphonomy and Paleoecology (3)

### Recommended Electives

These courses are not required, but are recommended. Students should consult with their advisor in the department concerning which courses are most appropriate for their interests and plans. It is further recommended that students obtain 3-4 credits of field experience in addition to GEOS 450.

BIOL 345 Principles of Ecology (4)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry II Lab (1)  
MATH 262 Calculus II (4)  
PHYS 201 General Physics II with Lab (4)

### Geoarchaeology Emphasis

#### Program Requirements (40 credits)

ANTH 115 Introduction to Archaeology (3)  
ANTH 300 Archaeology (3)  
GEOS 115 Physical Geology (4)  
GEOS 115L Physical Geology Lab (0)  
GEOS 117 Water, Land, and People (3)  
GEOS 117L Water, Land and People Lab (1)  
GEOS 301 Archaeological Prospection (3)  
GEOS 302 Mineralogy (3)  
GEOS 303 Petrology (3)  
GEOS 307 Introduction to GIS (3)  
GEOS 315 Sedimentology and Stratigraphy (3)  
GEOS 350 Geoarchaeology (3)  
GEOS 415 Reading Geochemical Fingerprints (3)  
GEOS 492 Senior Seminar (1)  
GEOS 455 Field Methods in Geoarchaeology (4) **or**  
ANTH 450 Field Work in Anthropology (6)

#### Related Requirements (12 credits)

Students must take 12 credits from those listed below. Students may select from SOIL 210 Intro Soil Science (NDSU) or SOIL 444 Soil Genesis/Survey (NDSU).

BIOL 115 Organismal Biology (4)  
BIOL 115L Organismal Biology Laboratory (0)  
BIOL 275 Quantitative Biology (4)

BIOL 305 General Botany (4)  
BIOL 345 Principles of Ecology (4)  
CHEM 150 General Chemistry I (3)  
CHEM 150L General Chemistry Laboratory I (1)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry II Lab (1)  
GEOS 207 GPS Field Techniques (3)  
GEOS 407 Spatial Analysis (4)  
MATH 234 Introduction to Probability and Statistics (3)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
PHYS 160 College Physics I with Lab (3) **or**  
PHYS 200 General Physics I with Lab (3)  
PHYS 161 College Physics II with Lab (4) **or**  
PHYS 201 General Physics II with Lab (4)

#### Restricted Electives (9 credits)

Students must select at least nine credits from the listed courses. Students should consult with their advisor in the department to determine which elective courses are most appropriate for their interests and plans.

ANTH 120 Introduction to Physical Anthropology (3)  
ANTH 216 The Paleolithic Age (3)  
ANTH 217 The Rise of Civilization (3)  
ANTH 315 North American Archaeology (3)  
ANTH 390 Topics in Anthropology (1-3)  
GEOS 116 Historical Geology (3)  
GEOS 205 Thinking Spatially (3)  
GEOS 210 Cartography  
GEOS 325 Reading Landscape: Ways of Seeing (3)  
GEOS 340 Economic and Environmental Geology (3)  
GEOS 370 Structural Geology and Mapping (3)  
GEOS 390 Topics in Geosciences (1-3)  
GEOS 397 Research in Geosciences (1-3)  
GEOS 416 Paleontology (3)  
GEOS 417 Taphonomy and Paleoecology (3)  
GEOS 450 Field Geology (3)

#### **Minor in Anthropology – 21 credits**

ANTH 110 Introduction to Cultural Anthropology (3)  
ANTH 115 Introduction to Archaeology (3)  
ANTH 120 Introduction to Physical Anthropology (3)

Students, in consultation with a faculty advisor, must take one upper level archaeology course, one upper level cultural anthropology course, and two upper level anthropology electives.

#### **Minor in Geosciences – 18 credits**

A minimum of 18 credits must be taken from among Geosciences courses. At least 6 credits must be taken from Geosciences courses at the 100 level, and 9 credits must be at the 300 level or above. Students

interested in an emphasis in geology, geoarchaeology, or geographical science should consult with a department faculty member.

### **Certificate in Geographic Information Science – 12 credits**

Certificate provides a focused area of study and basic competency in the theory, technology, and application of Geographic Information Science.

#### **Student Learning Outcomes**

- Use computer software to manage, manipulate, analyze, and display spatial data.
- Operate GPS devices to record field data and import into a computer environment.
- Make professional maps in digital and hardcopy formats.
- Access spatial data online and convert hardcopy data to digital format.
- Address practical problems with critical spatial thinking abilities and provide GIS-based solutions.

GEOS 205 Thinking Spatially (3)

GEOS 207 GPS Field Techniques (3)

GEOS 210 Cartography (3)

GEOS 307 Introduction to GIS (3)

### **Biosciences**

#### **Biosciences Department**

**Hagen Hall 407, (218) 477-2572**

**Chair:** Brian Wisenden

**Faculty:** Sara Anderson, Ellen Brisch, Chris Chastain, Andrew Marry, Chris Merkord, Sumali Pandey, Adam Stocker, Donna Bruns Stockrahm, Alison Wallace, Patricia Wisenden

The Biosciences department offers a Bachelor of Arts degree in Biology and four Bachelor of Science degrees. The **Bachelor of Science in Biology: Health and Medical Sciences (HMS)** provides students with pre-professional training in a variety of fields in human health. The **Bachelor of Science in Ecology and Evolutionary Biology (EEB)** prepares students for careers in natural resource management, organismal and ecosystem processes and preparation for advanced study in these areas. The **Bachelor of Science in Cellular and Molecular Biology (CMB)** prepares students for careers in biological processes that occur at the cellular and molecular levels. The **Bachelor of Science in Life Science Education (LSE)** prepare students for a career in teaching biology in middle and high school. Biosciences faculty advise students in a number of pre-professional areas such as pre-medicine, pre-optometry, pre-veterinary medicine, pre-physical and occupational therapy, pre-physician's assistant, pre-chiropractic, and pre-respiratory care. There is a 3 + 3 articulation agreement between MSUM and Northwestern Health Sciences University for entry into the NWSU Doctor of Chiropractor program.

Students from other majors can minor in general Biology or minor in Biology in one of the areas of concentration represented by the B.S. degrees in HMS, EEB, or CMB. Teaching licensure is available in life sciences (grades 9-12). This licensure meets the requirements for licensure in science (grades 5-8). The sequential nature of the biology curriculum and the necessity to coordinate certain biology courses with required courses in other disciplines makes it important that students consult early and often with a member of the Biosciences faculty.

Transfer students wishing to complete a Biology major must complete at least 6 credits selected from approved 300-400 level courses in the Biosciences Department at MSUM regardless of the number of transfer credits accepted toward the major.

## **B.A. Degree in Biology**

This degree gives students a broad foundation in the biological sciences without emphasis toward any of the areas of specialty represented by the more career-oriented B.S. degrees in Biology. This open configuration allows flexibility in designing a degree path that does not align well with any of the B.S. degrees. To receive the B.A. Degree in Biology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree, which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Understand fundamental biological concepts at the molecular, cellular, organismal, and ecosystem levels.
- Recognize evolution by natural selection as a unifying theme across biological disciplines.
- Demonstrate competence in lab and field skills and application of discipline-specific skills professional skills.
- Apply critical thinking skills and quantitative tools to evaluate biological information.
- Practice effective oral and written communication of scientific ideas in the manner of professional biologists.
- Acquire and refine research skills starting in introductory and advanced courses.
- Have the opportunity to participate in faculty-mentored independent research.
- Acquire multicultural and ethical perspectives in the advancement and application of science in society.

### **Core Requirements (23 credits)**

Students must take the lecture and lab together for Organismal Biology and Cell Biology.

BIOL 111 Cell Biology (4)

BIOL 115 Organismal Biology (4)

BIOL 341 Genetics (4)

BIOL 345 Principles of Ecology (4)

BIOL 348 Evolutionary Biology (3)

BIOL 350 Microbiology (4)

### **Related Requirements (16 credits)**

Students must complete at least six credits in mathematics at the level of MATH 127 or above. Students must complete General Chemistry I and General Chemistry II and their corresponding labs. Students may choose from College Physics I and II OR General Physics I and II.

CHEM 150 General Chemistry I (3)

CHEM 150L General Chemistry Laboratory I (1)

CHEM 210 General Chemistry II (3)

CHEM 210L General Chemistry II Lab (1)

PHYS 160 College Physics I with Lab (4) **and**

PHYS 161 College Physics II with Lab (4) **or**

PHYS 200 General Physics I with Lab (4) **and**

PHYS 201 General Physics II with Lab (4)

### Restricted Electives (12 credits)

Students must take one course from the Physiology area (Biology 347, 349, or 360); one course from the Zoology area (Biology 321, 322, 372, 402, or 455); one course from the Cellular and Molecular area (Biology 365, 385, 385L, 430, or 438); and one course from the Botany area (Biology 305, 325 or 326). Students who enroll in BIOL 385L must also enroll in BIOL 385.

BIOL 305 General Botany (4)  
BIOL 321 Invertebrate Zoology (3)  
BIOL 322 Vertebrate Zoology (4)  
BIOL 326 Minnesota Plant Identification (4)  
BIOL 347 Plant Physiology (4)  
BIOL 349 Human Physiology (4)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 372 Aquatic Biology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 385L Molecular Biology Lab (1)  
BIOL 402 Principles of Animal Behavior (3)  
BIOL 430 Immunobiology (3)  
BIOL 438 Medical Microbiology (3)  
BIOL 455 Wildlife Ecology (4)

### **B.S. Degree in Cellular and Molecular Biology**

This is a broad and flexible degree is designed to prepare students for careers in cellular and molecular biology. With this degree, students can pursue careers in agriculture and food, ecotoxicology, genes and gene expression, physiological functions, ecological interactions and evolutionary phylogeny, disease and pathology, and preparation for advanced study and careers in research. To receive the B.S. Degree in Cellular and Molecular Biology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree, which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Understand fundamental biological concepts at the molecular, cellular, organismal, and ecosystem levels.
- Recognize evolution by natural selection as a unifying theme across biological disciplines.
- Demonstrate competence in general lab and field skills and be introduced to discipline-specific skills and their professional applications.
- Apply critical thinking skills and quantitative tools to evaluate biological information.
- Practice effective oral and written communication of scientific ideas in the manner of professional biologists.
- Acquire basic research skills in introductory courses and refine these skills in advanced courses including independent research.
- Recognize the value of multicultural and ethical perspectives in the advancement and application of science in human society.

### Core Requirements (28 credits)

Students must take the lecture and lab together for Organismal Biology and Cell Biology.

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 275 Quantitative Biology (4)  
BIOL 341 Genetics (4)  
BIOL 350 Microbiology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 385L Molecular Biology Lab (1)  
BIOL 478 Research Design (3)  
BIOL 497 Research in Biology (1)

Related Requirements (27 credits)

Students must complete at least three credits in mathematics at the level of MATH 142 or above. Students must complete General Chemistry I, General Chemistry II, Organic Chemistry I and Biochemistry I and their corresponding labs. Students may choose from College Physics I and II OR General Physics I and II.

CHEM 150/CHEM 150L General Chemistry I and Lab (4)  
CHEM 210/CHEM 210L General Chemistry II and Lab (4)  
CHEM 350/CHEM 355 Organic Chemistry I and Lab (4)  
CHEM 400/CHEM 405 Biochemistry I and Lab (4)

PHYS 160 College Physics I with Lab (4) and  
PHYS 161 College Physics II with Lab (4)

**OR**

PHYS 200 General Physics I with Lab (4) and  
PHYS 201 General Physics II with Lab (4)

One math course  $\geq$  MATH 142 (3-5)

Restricted Electives (16-19 credits)

At least two courses in cellular and molecular biology

BIOL 347 Plant Physiology (4)  
BIOL 349 Human Physiology (4)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 430 Immunobiology (3)  
BIOL 438 Medical Microbiology (3)

At least one biotechniques course

BCBT 461 Nucleic Acids & Informatics (3)  
BCBT 462 Cell Culture and Immunochemistry (3)  
BCBT 463 Proteomics & Advanced Chromatography (3)

At least one advanced course in organismal, population or ecosystem biology

BIOL 305 Botany (4)  
BIOL 321 Invertebrate Zoology (3)  
BIOL 322 Vertebrate Zoology (4)  
BIOL 326 Minnesota Plant Identification (4)  
BIOL 345 Principles of Ecology (4)



BIOL 348 Evolutionary Biology (3)  
BIOL 372 Aquatic Biology (4)  
BIOL 402 Principles of Animal Behavior (3)  
BIOL 455 Wildlife Ecology (4)

#### Recommended Electives

CHEM 360 Organic Chemistry II  
CHEM 365 Organic Chemistry II Lab  
MATH 261 Calculus I  
MATH 262 Calculus II

### **B.S. Degree in Ecology and Evolutionary Biology**

This degree prepares student for careers in resource management, conservation biology, studies at the population and ecosystem levels, and preparation for advanced study in organismal biology. This is also the recommended path for preparation for Veterinary School. To receive the B.S. Degree in Ecology and Evolutionary Biology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree, which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Understand fundamental biological concepts at the molecular, cellular, organismal, and ecosystem levels.
- Recognize evolution by natural selection as a unifying theme across biological disciplines.
- Demonstrate competence in general lab and field skills and be introduced to discipline-specific skills and their professional applications.
- Apply critical thinking skills and quantitative tools to evaluate biological information.
- Practice effective oral and written communication of scientific ideas in the manner of professional biologists.
- Acquire basic research skills in introductory courses and refine these skills in advanced courses including independent research.
- Recognize the value of multicultural and ethical perspectives in the advancement and application of science in human society.

#### Core Requirements (32-33 credits)

Students must take the lecture and lab together for Organismal Biology and Cell Biology.

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 341 Genetics (4)  
BIOL 275 Quantitative Biology (4)  
BIOL 345 Principles of Ecology (4)  
BIOL 348 Evolutionary Biology (3)  
BIOL 478 Research Design (3)  
BIOL 497 Research in Biology (3)  
BIOL 365 Developmental Biology (4) **OR**  
BIOL 385 Molecular Biology (3)

#### Related Requirements (19 credits)

Students must complete one MATH course from the list. Students must complete eight credits of General

Chemistry I & II. Students must complete eight credits of PHYS chosen from College Physics I & II OR General Physics I & II.

CHEM 150/CHEM 150L General Chemistry I (4)  
CHEM 210/CHEM 210L General Chemistry II (4)  
MATH 127 College Algebra (3) OR  
MATH 142 Pre-Calculus (5) OR  
MATH 143 Trigonometry (3) OR  
MATH 261 Calculus I (4)  
PHYS 160 College Physics I with Lab (4) and  
PHYS 161 College Physics II with Lab (4) OR  
PHYS 200 General Physics I with Lab (4) and  
PHYS 201 General Physics II with Lab (4)

#### Electives (6 credits)

Select a minimum of six credits from the following list of courses:

BIOL 335 Tropical Field Biology (3)  
BIOL 346 An Ecological Perspective (3)  
BIOL 365 Developmental Biology (4)  
BIOL 469 Internship (1-12)  
BIOL 470 Undergraduate Laboratory Teaching (1)  
BIOL 497 Undergraduate Research in Biology (1-3)  
CHEM 350 Organic Chemistry I (3)  
CHEM 355 Organic Chemistry I Lab (1)  
CHEM 360 Organic Chemistry II (3)  
CHEM 365 Organic Chemistry II Lab (1)  
CHEM 400 Biochemistry I (3)  
CHEM 405 Biochemistry Laboratory I (1)  
CHEM 410 Biochemistry II (3)  
GEOS 305 Oceanography (3)  
GEOS 416 Paleontology (3)  
GEOS 417 Taphonomy and Paleoecology (3)  
HSAD 326 Epidemiology (3)  
MATH 262 Calculus II (4)

#### Restricted Electives (15 credits)

Students must complete a minimum of one course from the Suborganismal area (Select from BIOL 347, 349, 360); one course from the Organismal area (Select from Biology 305, 321, 322, 350); one course from the Populations and Ecosystems area (Select from Biology 326, 372, 402, 455); and two additional courses to reach a minimum of 15 credits.

BIOL 305 General Botany (4)  
BIOL 321 Invertebrate Zoology (3)  
BIOL 322 Vertebrate Zoology (4)  
BIOL 326 Minnesota Plant Identification (4)  
BIOL 347 Plant Physiology (4)  
BIOL 349 Human Physiology (4)

BIOL 350 Microbiology (4)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 372 Aquatic Biology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 385L Molecular Biology Lab (1)  
BIOL 402 Principles of Animal Behavior (3)  
BIOL 455 Wildlife Ecology (4)

### **Geospatial Analysis Emphasis**

Program Requirements (18 credits)  
GEOS 205 Thinking Spatially (3)  
GEOS 207 GPS Field Techniques (3)  
GEOS 210 Cartography (3)  
GEOS 307 Introduction to GIS (3)

One advanced course in geospatial analysis

GEOS 407 Spatial Analysis (4) **OR**  
Approved Advanced GEOS Course

Research experience in applying GIS to a biological system

BIOL 497 Research in Biology (3) **OR**  
GEOS 397 Research in Biosciences (3)

### **B.S. Degree in Biology: Health and Medical Sciences**

This degree prepares students for careers in human health such as medicine, physician assistant, physical therapy, occupational therapy, dentistry, chiropractic, optometry and medical physics. To receive the B.S. Degree in Health and Medical Sciences, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Understand fundamental biological concepts at the molecular, cellular, organismal, and ecosystem levels.
- Recognize evolution by natural selection as a unifying theme across biological disciplines.
- Demonstrate competence in general lab and field skills and be introduced to discipline-specific skills and their professional applications.
- Apply critical thinking skills and quantitative tools to evaluate biological information.
- Practice effective oral and written communication of scientific ideas in the manner of professional biologists.
- Acquire basic research skills in introductory courses and refine these skills in advanced courses including independent research.
- Recognize the value of multicultural and ethical perspectives in the advancement and application of science in human society.

#### **Core Requirements (24 credits)**

Students must take the lecture and lab together for Organismal Biology and Cell Biology.

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 341 Genetics (4)  
BIOL 323 Human Anatomy (4)  
BIOL 349 Human Physiology (4)  
BIOL 350 Microbiology (4)

Related Requirements (16 credits)

Math (6-7 credits). We recommend:

- (a) Two MATH courses at the level of MATH 127 or higher - OR -
- (b) Two MATH courses at the level of MATH 142 or higher - OR -
- (c) One MATH course at the level of MATH 142 or higher and BIOL 275

Chemistry (8 credits)

CHEM 150/CHEM 150L General Chemistry I (4)  
CHEM 210/CHEM 210L General Chemistry II (4)

Physics (8 credits)

PHYS 160 College Physics I with Lab (4) and  
PHYS 161 College Physics II with Lab (4)

**OR**

PHYS 200 General Physics I with Lab (4) and  
PHYS 201 General Physics II with Lab (4)

Electives (18 credits)

Students must earn a minimum of eighteen credits from biology courses approved for majors and/or the following list of electives. Course selection should be made in consultation with a faculty advisor and will vary with the pre-professional area of interest.

ACCT 230 Principles of Accounting I (3)  
ANTH 306 Medical Anthropology (3)  
AT 210 Medical Terminology (1)  
BIOL 275 Quantitative Biology (4)  
BIOL 300 Biology of Women (3)  
BIOL 345 Principles of Ecology (4)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 385L Molecular Biology Lab (1)  
BIOL 390 Blood Work in the Medical Laboratory (topics) (3)  
BIOL 430 Immunobiology (3) WI  
BIOL 438 Medical Microbiology (3)  
BIOL 478 Research Design (3)  
ENTR 230 Entrepreneurial Finance (3)  
CHEM 350 Organic Chemistry I (3)  
CHEM 355 Organic Chemistry I Lab (1)  
CHEM 360 Organic Chemistry II (3)

CHEM 365 Organic Chemistry II Lab (1)  
CHEM 380 Analytical Chemistry I (4)  
CHEM 400 Biochemistry I (3)  
CHEM 405 Biochemistry Laboratory I (1)  
CHEM 410 Biochemistry II (3)  
COMM 211 Group and Team Communication (3)  
COMH 315 Health Agencies and Services (3)  
COMH 418 Global Health Issues (3)  
CSIS 104 Spreadsheet and Database Applications (3)  
ENGL 387 Technical Report Writing (3)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 330 Disease Prevention (2)  
HSAD 326 Epidemiology (3)  
HSAD 401 Health Aspects of Aging (3)  
HSAD 414 Health Services Planning and Evaluation (3)  
HSAD 416 Health Services Management (3)  
HSAD 418 Medical and Health Care Law (3)  
HSAD 419 Financial Management of Health Care Organizations (3)  
MATH 234 Introduction to Probability and Statistics (3)  
MGMT 260 Principles of Management (3)  
PE 320 Anatomical Kinesiology (3)  
PE 420 Biomechanics (3)  
PHIL 311 Morals and Medicine (3)  
PHIL 318 Professional Ethics (3)  
PHYS 318 Biophysics and Medical Imaging  
PHYS 325 Optics  
PSY 202 Developmental Psychology (3)  
PSY 220 Social Behavior (3)  
PSY 261 Personality (3)  
PSY 265 Health Psychology (3)  
PSY 310 Psychology of Women (3)  
PSY 317 Alcoholism and Drug Abuse (3)  
PSY 320 Social Psychology (3)  
PSY 345 Physiological Psychology (3)  
PSY 402 Child/Adolescent Psychology (3)  
PSY 403 Adulthood and Aging (3)  
PSY 463 Abnormal Psychology (3)  
SOC 308 Social Gerontology (3)  
SOC 375 Sociology of Health and Medicine (3)  
SW 411 Chemical Dependency (3)

Restricted Electives (3 credits)

Students must take one course, of at least 3 credits, from the list below:

BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 385L Molecular Biology Lab (1)

BIOL 430 Immunobiology (3)  
BIOL 438 Medical Microbiology (3)

### **Public Health Emphasis**

#### **Program Requirements (18 credits)**

BIOL 248 Introduction to Public Health (3)  
BIOL 438 Medical Microbiology (3)  
HSAD 218 Introduction to Health Care and Global Health (3)  
HSAD 326 Epidemiology (3)  
PSY 113 General Psychology (3)  
SOC 110 Introduction to Sociology (3)

#### **Restricted Electives (12 credits)**

Twelve credits from the following list:

BIOL 300 Biology of Women (3)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 385/BIOL 385L Molecular Biology w/Lab (4)  
BIOL 406 DNA as Destiny: Genetics and Society (3)  
CHEM 350/CHEM 355 Organic Chemistry I w/Lab (4)  
CHEM 360/CHEM 365 Organic Chemistry II w/Lab (4)  
CHEM 400/CHEM 405 Biochemistry I (4)  
CHEM 410 Biochemistry II (3)  
HIST 374 Plagues and Peoples: Disease and the Environment (3)  
HLTH 110 Personal Health and Wellness (3)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 311 Health in the Elementary Schools (2)  
HLTH 327 Safety Education and Consumer Protection (3)  
HLTH 330 Disease Prevention (2)  
HLTH 335 Health Education and the Middle Level Adolescent (3)  
HLTH 340 Health Methods and Materials (3)  
HLTH 412 Education for Sexuality and HIV/AIDS (3)  
HLTH 465 Coordinated School Health Programs (2)  
HSAD 403 Health Informatics (3)  
HSAD 414 Health Services Planning and Evaluation (3)  
HSAD 416 Leadership in Healthcare (3)  
HSAD 417 Quality Management in Health Care (3)  
HSAD 418 Healthcare Law and Ethics (3)  
PHIL 311 Morals and Medicine (3)  
PHIL 335 Death and Dying (3)  
PSY 220 Social Behavior (3)  
PSY 261 Personality (3)  
PSY 265 Health Psychology (3)  
PSY 317 Alcoholism and Drug Abuse (3)  
PSY 324 Environmental Psychology (3)

SOC 120 Social Psychology (3)  
SOC 210 Social Problems (3)  
SOC 319 Society and the Environment (3)  
SW 250 Introduction to Social Work (3)  
SW 330 Human Behavior and the Social Environment (3)

### **B.S. Degree in Life Science Education**

To receive the B.S. Degree in Life Science Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

#### **Student Learning Outcomes**

- Understand fundamental biological concepts at the molecular, cellular, organismal, and ecosystem levels.
- Recognize evolution by natural selection as a unifying theme across biological disciplines.
- Demonstrate competence in general lab and field skills and be introduced to discipline-specific skills and their professional applications.
- Apply critical thinking skills and quantitative tools to evaluate biological information.
- Practice effective oral and written communication of scientific ideas in the manner of professional biologists.
- Acquire basic research skills in introductory courses and refine these skills in advanced courses including independent research.
- Recognize the value of multicultural and ethical perspectives in the advancement and application of science in human society.

#### **Core Requirements (69 credits)**

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 341 Genetics (4)  
BIOL 345 Principles of Ecology (4)  
BIOL 347 Plant Physiology (4)  
BIOL 348 Evolutionary Biology (3)  
BIOL 350 Microbiology (4)  
BIOL 440 Middle School/Secondary Science Teaching Methods (3)  
BIOL 497 Undergraduate Research in Biology (3)

**Total: 33 credits**

#### **Secondary Education Licensure Requirements**

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**

ED 461V Student Teaching: Secondary/K-12 (12)

SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

Related Requirements (32 credits)

Students must complete 8 credits of CHEM, and 8 credits of PHYS (chosen from College Physics I and II OR General Physics I and II) and 10 credits of GEOS. In addition to these requirements, students must complete six credits in MATH at the 127 level or above.

CHEM 150 General Chemistry I (3)

CHEM 150L General Chemistry Laboratory I (1)

CHEM 210 General Chemistry II (3)

CHEM 210L General Chemistry II Lab (1)

GEOS 115 Physical Geology (4)

GEOS 116 Historical Geology (3)

GEOS 360 Planetary Science (3)

PHYS 160 College Physics I with Lab (4) **and**

PHYS 161 College Physics II with Lab (4) **or**

PHYS 200 General Physics I with Lab (4) **and**

PHYS 201 General Physics II with Lab (4)

**Minor in Health and Medical Sciences – 20 credits**

BIOL 111 Cell Biology (4)

BIOL 115 Organismal Biology (4)

BIOL 323 Human Anatomy (4)

BIOL 349 Human Physiology (4)

Select one of the following courses:

BIOL 236 Introduction to Microbiology (3)

BIOL 341 Genetics (4)

BIOL 350 Microbiology (4)

BIOL 365 Developmental Biology (4)

**Minor in Biology – 21 credits**

BIOL 111 Cell Biology (4)

BIOL 115 Organismal Biology (4)

BIOL 341 Genetics (4)

Select three courses from the list, but only one of the following may be used: BIOL 347, BIOL 349 or BIOL 360.

BIOL 305 General Botany (4)

BIOL 321 Invertebrate Zoology (3)

BIOL 322 Vertebrate Zoology (4)

BIOL 345 Principles of Ecology (4)

BIOL 347 Plant Physiology (4)

BIOL 348 Evolutionary Biology (3)

BIOL 349 Human Physiology (4)



BIOL 350 Microbiology (4)  
BIOL 360 Cellular and Molecular Physiology (4)  
BIOL 365 Developmental Biology (4)  
BIOL 372 Aquatic Biology (4)  
BIOL 385 Molecular Biology (3)  
BIOL 402 Principles of Animal Behavior (3)  
BIOL 455 Wildlife Ecology (4)

### **Minor in Ecology and Evolution – 24 credits**

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 345 Principles of Ecology (4)

Select three courses from the list:

BIOL 305 General Botany (4)  
BIOL 321 Invertebrate Zoology (3)  
BIOL 322 Vertebrate Zoology (4)  
BIOL 341 Genetics (4)  
BIOL 348 Evolutionary Biology (3)  
BIOL 350 Microbiology (4)  
BIOL 372 Aquatic Biology (4)  
BIOL 402 Principles of Animal Behavior (3)  
BIOL 455 Wildlife Ecology (4)

### **Minor in Public Health – 22 credits**

This minor introduces students from majors other than Biology to the fundamentals of public health. This minor augments the credentials of students from any major, and prepares them for application to a Master of Public Health program should they decide to pursue public health as a career.

#### **Student Learning Outcomes**

- Students will understand the biological aspects of public health.
- Students will understand the role of breadth of career options in public health.
- Students will understand the interactions between society, individual actions and the health of populations.

BIOL 248 Introduction to Public Health (3)  
BIOL 275 Quantitative Biology (4)  
HSAD 326 Epidemiology & Introductory Biostatistics (3)

#### **12 credits of electives**

BIOL 350 Microbiology (4)  
BIOL 406 DNA as Destiny: Genetics and Society (3)  
BIOL 430 Immunobiology (3)  
BIOL 438 Medical Microbiology (3)  
HIST 374 Plagues and Peoples: Disease and the Environment (3)  
HSAD 218 Introduction to Healthcare and Global Health (3)  
PHIL 311 Morals and Medicine (3)

## **Chemistry and Biochemistry**

### **Chemistry and Biochemistry Department**

**Hagen Hall 103, (218) 477-2136**

**Chair:** Richard Lahti

**Faculty:** Gary Edverson, Shawn Garrett, Craig Jasperse, Michelle Tigges

**NOTE: Chemistry and Biochemistry degree requirements will be undergoing major revisions to be effective FALL 2019.**

Minnesota State University Moorhead's Chemistry and Biochemistry Department is on the Approved List of the American Chemical Society (ACS). Less than half of the nation's chemistry departments meet the rigorous standards set by the ACS Committee on Professional Training for faculty, library resources, laboratory space, equipment, and curriculum. A major strength of the chemistry program is its emphasis on undergraduate research. Five different degrees are available:

- B.S. degree in Chemistry (ACS approved);
- B.A. degree in Chemistry with emphasis in biological chemistry, business, chemical physics, computational chemistry or mathematics;
- B.S. degree in Biochemistry and Biotechnology with emphasis in biochemistry and molecular biology or emphasis in biological chemistry (ACS approve);
- B.S. degree in Chemistry Education.

There are also minors offered in biochemistry and biotechnology and chemistry, and a certificate in biochemistry and biotechnology.

The **B.S. degree in Chemistry** is a rigorous four-year course of study designed for those students who plan graduate programs in chemistry and its related fields, a career in chemical industries, or chemical professions. ACS is an organization of professional chemists that, among other activities, sets standards for chemistry education.

The **B.A. degree in Chemistry** can be earned with emphases in a number of areas such as biological chemistry, business, chemical physics, computational chemistry or mathematics. This flexibility allows students to include the related field courses in their chemistry program that best fit their future career, graduate school or professional school needs.

The **B.S. degree in Biochemistry and Biotechnology** is a degree that combines studies in both biology and chemistry. This major is designed to teach advanced laboratory skills in the major areas of biochemistry and biotechnology. It provides a laboratory-rich, research-based experience that emphasizes hands-on learning. It includes the application of techniques used in the study of enzymology, cellular physiology, molecular biology and immunology.

The **B.S. degree in Chemistry Education** is part of the certification process to teach chemistry in Minnesota high schools. Students completing this major may also be certified to teach middle school science, grades 5-8. In addition to completing the chemistry core curriculum and middle school science coursework, students must also complete courses in professional (teacher) education.

Biochemistry is the study of chemistry and living systems. Biotechnology is the use of cellular and biomolecular processes to solve problems and make useful products. The different emphases, minor, and certificate offered in Biochemistry and Biotechnology are designed to prepare students for a wide array career and educational opportunities.

The Biochemistry and Biotechnology Degree has two emphases: 1) Biochemistry and Molecular Biology and 2) Biological Chemistry. All students completing a BCBT Major must complete one of the two emphases. The BCBT Major is designed to be a research-based, laboratory-intensive program focusing on training undergraduates in both the theories and practices of the discipline. All BCBT majors are required to participate in a small-group, senior-year research project mentored by one of the BCBT faculty members. Upon graduating with a BCBT Major approximately 30% of students attend medical school, 30% go directly to work in industry, and 40% attend graduate school.

BCBT Majors are strongly encouraged to participate in research outside of their coursework as early as possible in their academic career.

The Biochemistry and Biotechnology Industries are regulated by the U.S. Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), and the Department of Agriculture (USDA). The BCBT Industry Certificate is a unique, advanced training opportunity that prepares people to work in the highly regulated bioscience, pharmaceutical, and chemistry industries. The Certificate Program prepares undergraduates to enter the workforce, provides training to incumbent workers for career advancement, and retrains displaced workers for new careers.

## **B.S. Degree in Biochemistry & Biotechnology**

To receive the B.S. Degree in Biochemistry and Biotechnology, the student must meet the minimum university requirements and specific requirements for the program and complete one of two emphases. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical biochemistry, molecular biology, and biotechnology.
- Demonstrate skills in analytical thinking, problem solving and application of scientific methods to experimental data.
- Demonstrate skills in laboratory operations including techniques, instrumentation, experimental design, interpretation and reporting of experimental results.
- Demonstrate ability to design and conduct biochemical research projects.
- Demonstrate written and oral communication skills.

### **Core Requirements (67 credits)**

Students must also complete an emphasis in either Biological Chemistry or Biochemistry & Molecular Biology.

BIOL 111/BIOL 111L Cell Biology with lab (4)

BIOL 115/BIOL 115L Organismal Biology with lab (4)

BIOL 341/BIOL 341L Genetics with lab (4)

BIOL 385/BIOL 385L Molecular Biology with lab (4)

CHEM 150/CHEM 150L General Chemistry I with lab (4)

CHEM 210/CHEM 210L General Chemistry II with lab (4)  
CHEM 350/CHEM 355 Organic Chemistry I with lab (4)  
CHEM 360/CHEM 365 Organic Chemistry II with lab (4)  
CHEM 400/CHEM 405 Biochemistry I with lab (4)  
CHEM 410 Biochemistry II (3)  
BCBT 120 Introduction to Biochemistry and Biotechnology Careers (1)  
BCBT 220 Survey of BCBT Research and Methodology (1)  
BCBT 360 Team-based BCBT Research (3)  
BCBT 460 BCBT Literature Review and Presentation (1)  
MATH 261 Calculus I (4)

Physiology (choose one course)

BIOL 347/BIOL 347L Plant Physiology with lab (4) or  
BIOL 349/BIOL 349L Human Physiology with lab (4) or  
BIOL 360/BIOL 360L Cellular and Molecular Physiology with lab (4)

Biology (choose one course)

BIOL 323/BIOL 323L Human Anatomy with lab (4) or  
an additional physiology elective (BIOL 347, BIOL 349, or  
BIOL 360) (4) or  
BIOL 350/BIOL 350L Microbiology with lab (4) or  
BIOL 365/BIOL 365L Developmental Biology with lab (4) or  
BIOL 430 Immunobiology (3)

Biotechniques (choose one course)

BCBT 461 Nucleic Acids & Bioinformatics (3) or  
BCBT 462 Cell Culture & Immunochemistry (3) or  
BCBT 463 Proteomics & Advanced Chromatography (3)

Physics I (choose one course)

PHYS 160 College Physics I with lab (4) or  
PHYS 200 General Physics I with lab (4)

Physics II (choose one course)

PHYS 161 College Physics II with lab (4) or  
PHYS 201 General Physics II with lab (4)

### **Biological Chemistry Emphasis**

**Program Requirements (19 credits)**

CHEM 300 Inorganic Chemistry (3)  
CHEM 380 Analytical Chemistry with lab (4)  
CHEM 450/CHEM 455 Physical Chemistry I with lab (4)  
BCBT 450 Biophysical Chemistry (3)  
BCBT 497 Senior Research Thesis (1)  
MATH 262 Calculus II (4)

### Restricted Electives (3 credits)

At least three additional credits of a restricted elective from the list below:

BCBT 397 BCBT Research (1)  
BCBT 461 Biotechniques: Nucleic Acids and Bioinformatics (3)  
BCBT 462 Cell Culture and Immunochemistry (3)  
BCBT 463 Proteomics and Advanced Chromatography (3)  
BIOL 275 Quantitative Biology (4)  
BIOL 323/BIOL 323L Human Anatomy with lab (4)  
BIOL 347/BIOL 347L Plant Physiology with lab (4)  
BIOL 349/BIOL 349L Human Physiology with lab (4)  
BIOL 350/BIOL 350L Microbiology with lab (4)  
BIOL 360/BIOL 360L Cellular and Molecular Physiology with lab (4)  
BIOL 365/BIOL 365L Developmental Biology with lab (4)  
BIOL 430 Immunobiology (3)  
CHEM 397 Undergraduate Research (1)  
CHEM 420 Inorganic Chemistry II (3)  
CHEM 425 Inorganic Chemistry II Lab (1)  
CHEM 460 Physical Chemistry II (3)  
CHEM 465 Physical Chemistry II Lab (1)  
CHEM 469 Internship (1-12)  
CHEM 480 Analytical Chemistry II with Lab (4)  
CHEM 498 Senior Seminar (1)

### **Biochemistry & Molecular Biology Emphasis**

#### Program Requirements (13 credits)

Chemistry (choose one)

CHEM 300 Inorganic Chemistry (3) or  
CHEM 380 Analytical Chemistry with lab (4)

Physical Chemistry (choose one)

CHEM 450/455 Physical Chemistry I with lab (4) or  
BCBT 450 Biophysical Chemistry (3)

Biology

Any 300-level Biology course except for Biology 300, 346, 370, 406, or 440

Math (choose one)

MATH 262 Calculus II (4) or  
BIOL 275 Quantitative Biology (4)

#### Restricted Electives (3 credits)

At least three additional credits of a restricted elective from the list below

BCBT 397 BCBT Research (1)  
BCBT 450 Biophysical Chemistry (3)  
BCBT 461 Biotechniques: Nucleic Acids and Bioinformatics (3)  
BCBT 462 Cell Culture and Immunochemistry (3)  
BCBT 463 Proteomics and Advanced Chromatography (3)

BCBT 497 Senior Research Thesis (1)  
BIOL 323/BIOL 323L Human Anatomy with lab (4)  
BIOL 347/BIOL 347L Plant Physiology with lab (4)  
BIOL 349/BIOL 349L Human Physiology with lab (4)  
BIOL 350/BIOL 350L Microbiology with lab (4)  
BIOL 360/BIOL 360L Cellular and Molecular Physiology with lab (4)  
BIOL 365/BIOL 365L Developmental Biology with lab (4)  
BIOL 430 Immunobiology (3)  
CHEM 300 Inorganic Chemistry (3)  
CHEM 380 Analytical Chemistry with lab (4)  
CHEM 397 Undergraduate Research (1)  
CHEM 420 Inorganic Chemistry II (3)  
CHEM 425 Inorganic Chemistry II Lab (1)  
CHEM 450/CHEM 455 Physical Chemistry I with lab (4)  
CHEM 460 Physical Chemistry II (3)  
CHEM 465 Physical Chemistry II Lab (1)  
CHEM 469 Internship (1-12)  
CHEM 480 Analytical Chemistry II with Lab (4)  
CHEM 498 Senior Seminar

## **B.A. Degree in Chemistry**

The B.A. degree in Chemistry can be earned with emphases in a number of areas such as biological chemistry, business, chemical physics, computational chemistry or mathematics. This flexibility allows students to include the related field courses in their chemistry program that best fit their future career, graduate school or professional school needs. To receive the B.A. Degree in Chemistry, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical chemistry.
- Demonstrate skills in analytical thinking, problem solving and application of scientific methods to experimental data.
- Demonstrate skills in laboratory operations including techniques, instrumentation, experimental design, interpretation and reporting of experimental results.
- Demonstrate ability to design and conduct chemical research projects.
- Demonstrate written and oral communication skills.

### **Core Requirements (24 credits)**

CHEM 150 General Chemistry I (3)  
CHEM 150L General Chemistry Laboratory I (1)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry Laboratory II (1)  
CHEM 297 Introduction to Research (1)  
CHEM 300 Inorganic Chemistry I (3)  
CHEM 350 Organic Chemistry I (3)  
CHEM 355 Organic Chemistry Laboratory (1)  
CHEM 360 Organic Chemistry II (3)

CHEM 380 Analytical Chemistry I with lab (4)

CHEM 498 Senior Seminar (1)

**Program Requirements (9 credits)**

CHEM 365 Organic Chemistry II Lab (1)

CHEM 400 Biochemistry I (3)

CHEM 405 Biochemistry Laboratory I (1)

CHEM 450 Physical Chemistry I (3)

CHEM 455 Physical Chemistry I Lab (1)

**Related Requirements (19 credits)**

PHYS 160 College Physics I with Lab (4) **or** PHYS 200 General Physics I with Lab (4)

PHYS 161 College Physics II with Lab (4) **or** PHYS 201 General Physics II with Lab (4)

ENGL 387 Technical Report Writing (3)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

**Restricted Electives (12 credits)**

Students must choose twelve credits of electives from MATH, BIOL, CHEM, PHYS, or CSIS at the 300 level or higher in consultation with advisor.

**Biological Chemistry Emphasis**

**Program Requirements (20 credits)**

BIOL 111/BIOL 111L Cell Biology (4)

BIOL 341/BIOL 341L Genetics (4)

CHEM 365 Organic Chemistry II Lab (1)

CHEM 400 Biochemistry I (3)

CHEM 405 Biochemistry Laboratory I (1)

CHEM 410 Biochemistry II (3)

CHEM 450 Physical Chemistry I (3)

CHEM 455 Physical Chemistry I Lab (1)

**Related Requirements (19 credits)**

PHYS 160 College Physics I with Lab (4) **or** PHYS 200 General Physics I with Lab (4)

PHYS 161 College Physics II with Lab (4) **or** PHYS 201 General Physics II with Lab (4)

ENGL 387 Technical Report Writing (3)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4) **or**

MATH 234 Introduction to Probability and Statistics (3)

**Restricted Electives (12 credits)**

Students must earn twelve credits of Biology electives and at least 8 credits must be upper division (300 level or higher).

**Business Emphasis**

**Program Requirements (28 credits)**

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)  
CHEM 400 Biochemistry I (3)  
CHEM 405 Biochemistry Laboratory I (1)  
CSIS 104 Spreadsheet and Database Applications (3)  
ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
FINC 340 Financial Management (3)  
MGMT 260 Principles of Management (3)  
MKTG 270 Principles of Marketing (3)  
Related Requirements (9 credits)  
ENGL 387 Technical Report Writing (3)  
MATH 229 Calculus for Business and Social Sciences (3) **or**  
MATH 261 Calculus I (4)  
MATH 234 Introduction to Probability and Statistics (3)

#### Restricted Electives (12 credits)

Students must earn three upper division (300 or higher) elective credits in Chemistry. They must also earn three upper division elective credits in Chemistry or Biosciences **OR** three credits in Physics 160 or 200. Students must also earn six upper division elective credits from either Marketing, Finance, Management or take ACCT 304.

#### Chemical Physics Emphasis

##### Program Requirements (12 credits)

CHEM 365 Organic Chemistry II Lab (1)  
CHEM 450 Physical Chemistry I (3)  
CHEM 455 Physical Chemistry I Lab (1)  
CHEM 460 Physical Chemistry II (3)  
CHEM 465 Physical Chemistry Laboratory II (1)  
PHYS 202 Introduction to 20th Century Physics (3)

##### Related Requirements (19 credits)

PHYS 160 College Physics I with Lab (4) **or** PHYS 200 General Physics I with Lab (4)  
PHYS 161 College Physics II with Lab (4) **or** PHYS 201 General Physics II with Lab (4)  
ENGL 387 Technical Report Writing (3)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)

#### Restricted Electives (13 credits)

Students must earn nine upper division (300 level or higher) elective credits in Physics. In addition, students must earn at least four additional upper division credits from Math, Biology, Chemistry, Physics or Computer Science.

#### Computational Chemistry Emphasis

##### Program Requirements (18 credits)

CHEM 365 Organic Chemistry II Lab (1)



CHEM 400 Biochemistry I (3)  
CHEM 405 Biochemistry Laboratory I (1)  
CHEM 450 Physical Chemistry I (3)  
CHEM 455 Physical Chemistry I Lab (1)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 252 Introduction to Computers and Programming II (3)  
CSIS 352 Advanced Concepts in Programming (3)

Related Requirements (19 credits)

PHYS 160 College Physics I with Lab (4) **or** PHYS 200 General Physics I with Lab (4)  
PHYS 161 College Physics II with Lab (4) **or** PHYS 201 General Physics II with Lab (4)  
ENGL 387 Technical Report Writing (3)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)

Restricted Electives (10 credits)

Students must earn at least four additional upper division (300 level or higher) credits from Chemistry and six upper division elective credits from CSIS.

**Mathematical Chemistry Emphasis**

Program Requirements (18 credits)

CHEM 365 Organic Chemistry II Lab (1)  
CHEM 450 Physical Chemistry I (3)  
CHEM 455 Physical Chemistry I Lab (1)  
MATH 260 Computer Calculus (1)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 323 Multi-Variable and Vector Calculus (4)

Related Requirements (11 credits)

ENGL 387 Technical Report Writing (3)  
PHYS 200 General Physics I with Lab (4)  
PHYS 201 General Physics II with Lab (4)

Restricted Electives (13 credits)

Students must earn four upper division (300 level or higher) credits in Chemistry electives. In addition, students must earn at least six additional upper division Math credits and three upper division credits from Chemistry or the related fields of Biology, Computer Science, Math or Physics.

**B.S. Degree in Chemistry**

To receive the B.S. Degree in Chemistry, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

**Student Learning Outcomes**

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical chemistry.

- Demonstrate skills in analytical thinking, problem solving and application of scientific methods to experimental data.
- Demonstrate skills in laboratory operations including techniques, instrumentation, experimental design, interpretation and reporting of experimental results.
- Demonstrate ability to design and conduct chemical research projects.
- Demonstrate written and oral communication skills.

#### Core Requirements (48 credits)

CHEM 150 General Chemistry I (3)  
 CHEM 150L General Chemistry Laboratory I (1)  
 CHEM 210 General Chemistry II (3)  
 CHEM 210L General Chemistry II Lab (1)  
 CHEM 297 Introduction to Research (1)  
 CHEM 300 Inorganic Chemistry I (3)  
 CHEM 350 Organic Chemistry I (3)  
 CHEM 355 Organic Chemistry I Lab (1)  
 CHEM 360 Organic Chemistry II (3)  
 CHEM 365 Organic Chemistry II Lab (1)  
 CHEM 380 Analytical Chemistry I with Lab(4)  
 CHEM 397 Undergraduate Research (2)  
 CHEM 400 Biochemistry I (3)  
 CHEM 405 Biochemistry Laboratory I (1)  
 CHEM 420 Inorganic Chemistry II (3)  
 CHEM 425 Inorganic Chemistry II Lab (1)  
 CHEM 450 Physical Chemistry I (3)  
 CHEM 455 Physical Chemistry I Lab (1)  
 CHEM 460 Physical Chemistry II (3)  
 CHEM 465 Physical Chemistry Laboratory II (1)  
 CHEM 480 Analytical Chemistry II with Lab (4)  
 CHEM 497 Senior Thesis (1)  
 CHEM 498 Seminar (1)

#### Related Requirements (19 credits)

Students must take a combination of College Physics I & II OR General Physics I & II with the required labs.

ENGL 387 Technical Report Writing (3)  
 MATH 261 Calculus I (4)  
 MATH 262 Calculus II (4)  
 PHYS 160 College Physics I with Lab (4) **and**  
 PHYS 161 College Physics II with Lab (4) **or**  
 PHYS 200 General Physics I with Lab (4) **and**  
 PHYS 201 General Physics II with Lab (4)

#### Restricted Electives (12 credits)

Students must choose twelve credits of electives from MATH, BIOL, CHEM, PHYS, or CSIS at the 300 level or higher in consultation with advisor.

## **B.S. Degree in Chemistry Education**

To receive the B.S. Degree in Chemistry Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or higher is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

### **Student Learning Outcomes**

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical chemistry.
- Demonstrate skills in analytical thinking, problem solving and application of scientific methods to experimental data.
- Demonstrate skills in laboratory operations including techniques, instrumentation, experimental design, interpretation and reporting of experimental results.
- Demonstrate ability to design and conduct chemical research projects.
- Demonstrate written and oral communication skills.

### **Core Requirements (72 credits)**

Students must fulfill all teacher licensure requirements in addition to the chemistry content core, which adds 36 credits.

### **Chemistry**

CHEM 150/CHEM 150L General Chemistry I with lab (4)  
CHEM 210/CHEM 210L General Chemistry II with lab (4)  
CHEM 297 Introduction to Research (1)  
CHEM 300 Inorganic Chemistry I (3)  
CHEM 350 Organic Chemistry I (3)  
CHEM 355 Organic Chemistry I Lab (1)  
CHEM 380 Analytical Chemistry I with Lab (4)  
CHEM 397 Undergraduate Research (1)  
CHEM 400 Biochemistry I (3)  
CHEM 440 Secondary Science Teaching Methods (3)  
CHEM 450 Physical Chemistry I (3)  
CHEM 455 Physical Chemistry I Lab (1)

**Total: 31 credits**

### **Secondary Education Licensure Requirements**

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)

SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

Related Requirements (28 credits)

BIOL 111 Cell Biology (4)

BIOL 115 Organismal Biology (4)

GEOS 115 Physical Geology (4)

GEOS 116 Historical Geology (3)

GEOS 360 Planetary Science (3)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4) **or**

MATH 234 Introduction to Probability and Statistics (3)

PHIL 318 (3) Professional Ethics \*Designated WI course for major

Restricted Electives (8 credits)

PHYS 160 College Physics I (4) **OR** PHYS 200 General Physics I (4)

PHYS 161 College Physics II (4) **OR** PHYS 201 General Physics II (4)

**Minor in Biochemistry & Biotechnology – 22 credits**

BIOL 385/385L Molecular Biology with lab (4)

CHEM 400/405 Biochemistry I with lab (4)

CHEM 410 Biochemistry II (3)

Biotechniques course (choose one)

BCBT 461 Nucleic Acids & Bioinformatics (3) **or**

BCBT 462 Cell Culture & Immunochemistry (3) **or**

BCBT 463 Proteomics & Advanced Chromatography (3)

**At least 8 additional credits from the following list:**

**(no more than 3 credits from any combination of 397/497/469 courses)**

BCBT 397 BCBT Research (1)

BCBT 497 Senior Thesis (1)

BCBT 461 Biotechniques: Nucleic Acids and Bioinformatics (3)

BCBT 462 Cell Culture and Immunochemistry (3)

BCBT 463 Proteomics & Advanced Chromatography (3)

BCBT 469 Internship (1)

BCBT 497 Senior Research Thesis (1)

BIOL 347/BIOL 347L Plant Physiology with lab (4)

BIOL 349/BIOL 349L Human Physiology with lab (4)

BIOL 360/BIOL 360L Cellular and Molecular Physiology with lab (4)

**Minor in Chemistry – 22 credits**

CHEM 150 General Chemistry I (3)

CHEM 150L General Chemistry Laboratory I (1)

CHEM 210 General Chemistry II (3)

CHEM 210L General Chemistry II Lab (1)

CHEM 350 Organic Chemistry I (3)

CHEM 355 Organic Chemistry I Lab (1)

Students must earn ten credits in Chemistry electives at the 300 level or above, not to include CHEM 304.

### **Middle School Science Optional Licensure**

Completion of this program allows the student to apply for a Minnesota grades 5-8 general science teaching license. This license is not a stand alone license but may be added to any existing teaching license as per the Board of Teaching regulations.

CHEM 150/CHEM 150L General Chemistry I & Lab (4)  
CHEM 210/CHEM 210L General Chemistry II & Lab (4)  
PHYS 160 College Physics I & Lab (4) **OR** PHYS 200 General Physics I & Lab (4)  
PHYS 161 College Physics II & Lab(4) **OR** PHYS 201 General Physics II & Lab (4)  
BIOL 111/BIOL 111L Cell Biology & Lab (4)  
BIOL 115/BIOL 115L Organismal Biology & Lab (4)  
GEOS 115/GEOS 115L Physical Geology & Lab (4)  
GEOS 116 Historical Geology (3)  
GEOS 360 Planetary Science (3)  
BIOL 440/CHEM 440/PHYS 440 Secondary Science Teaching Methods (3)  
ED 460M Middle Level Student Teaching (4)  
ED 448 Reading Study Skills in the Content Areas (3)

### **Computer Science & Information Systems**

#### **Computer Science and Information Systems Department**

**Bridges Hall 160, (218) 477-2299**

**Chair:** Andrew Chen

**Faculty:** Yurii Boreisha, Daniel Brekke, Rhonda Ficek, Michael Haugrud

The Computer Science and Information Systems Department (CSIS) offers majors and minors in three areas: Computer Science, Computer Information Systems, and Computer Information Technology. Programs of study in Computer Science are intended for students planning to work in the high technology computer industry or pursue graduate work in computer science. Programs of study in Computer Information Systems are intended for students planning to work in applied areas that utilize computers as application tools. Programs of study in Computer Information Technology are intended for students interested in working on setting up the computing infrastructure of an organization, including network and system administration.

### **B.S. Degree in Computer Information Systems**

To receive the B.S. Degree in Computer Information Systems, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Students will be able to competently develop computer software.
- Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech.
- Students will possess competitive and comprehensive discipline-specific content knowledge.
- Students will be able to solve problems in their careers.

### Core Requirements (31 credits)

CSIS 145 Introduction to Information Systems (1)  
CSIS 241 Introduction to Web Design and Development (3)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CSIS 304 Databases (3)  
CSIS 336 C#.Net Programming (3)  
CSIS 340 Software Engineering (3)  
CSIS 349 Networks and Data Communications (3)  
CSIS 405 E-Commerce Technology (3)  
CSIS 433 Design, Implementation and Support of Information Systems (3)  
CSIS 446 Intelligent and Predictive Systems (3)

### Related Requirements (33 credits)

ACCT 231 Principles of Accounting II (3)  
ACCT 230 Principles of Accounting I (3)  
COMM 100 Speech Communication (3)  
ENGL 387 Technical Report Writing (3)  
FINC 340 Financial Management (3)  
MATH 210 Concepts from Discrete Mathematics (3)  
MATH 229 Topics in Calculus (3)  
MATH 234 Introduction to Probability and Statistics (3)  
MGMT 260 Principles of Management (3)  
MGMT 380 Operations Management (3)  
MGMT 456 Project Management in Business (3)

### Restricted Electives - 12 credits, with at least 9 elective credits at or above the 300 level.

CSIS 252 Introduction to Computers and Programming II (3)  
CSIS 290 Special Topics (1-3, up to 4 applied)  
CSIS 311 Server-Side Scripting (3)  
CSIS 316 Ethics in the Information Age (3)  
CSIS 335 Graphical User Interface Programming (3)  
CSIS 341 System and Network Administration (3)  
CSIS 352 Advanced Concepts in Programming (3)  
CSIS 360 Linux Programming and Development Tools (3)  
CSIS 349L Networking and Data Communications Lab (1)  
CSIS 441 Network Security (3)  
CSIS 469 Internship (up to 3 applied)  
CSIS 490 Topics in Computer Science and Information Systems (1-3, up to 3 applied)  
CSIS 494 Undergraduate Research (1-3, up to 3 applied)

## **B.S. Degree in Computer Information Technology**

To receive the B.S. Degree in Computer Information Technology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### Student Learning Outcomes

- Students will be able to competently develop computer software.

- Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech.
- Students will possess competitive and comprehensive discipline-specific content knowledge.
- Students will be able to solve problems in their careers.

#### Core Requirements (36 credits)

CSIS 103 Computer Concepts and Applications (3) **or**  
 CSIS 104 Spreadsheet and Database Applications (3)  
 CSIS 145 Introduction to Information Systems (1)  
 CSIS 241 Introduction to Web Design & Development (3)  
 CSIS 152 Introduction to Computers and Programming I-a (3)  
 CSIS 153 Introduction to Computers and Programming I-b (3)  
 CSIS 222 Computer Maintenance (1)  
 CSIS 304 Databases (3)  
 CSIS 311 Server-Side Scripting (3)  
 CSIS 341 System and Network Administration (3)  
 CSIS 349 Networks and Data Communications (3)  
 CSIS 349L Networks and Data Communications Lab (1)  
 CSIS 360 Linux Programming and Development Tools (3)  
 CSIS 441 Network Security (3)  
 CSIS 469 Internship (1-12) **or**  
 CSIS 405 E-Commerce Technology (3) **or**  
 CSIS 446 Intelligent and Predictive Systems (3)

#### Related Requirements (9 credits)

COMM 100 Speech Communication (3)  
 ENGL 387 Technical Report Writing (3)  
 MATH 210 Concepts from Discrete Mathematics (3)

#### Restricted Electives (12 credits)

At least 9 elective credits must be at or above the 300 level. At most 3 elective credits can come from CSIS 469.

CSIS 115 Introduction to MacOS X (1)  
 CSIS 252 Introduction to Computers and Programming II (3)  
 CSIS 290 Special Topics (1-3)  
 CSIS 316 Ethics in the Information Age (3)  
 CSIS 320 Architecture (4)  
 CSIS 335 Graphical User Interface Programming (3)  
 CSIS 336 C#.Net Programming (3)  
 CSIS 340 Software Engineering (3)  
 CSIS 352 Advanced Concepts in Programming (3)  
 CSIS 405 E-Commerce Technology (3)  
 CSIS 430 Operating Systems (4)  
 CSIS 433 Design, Implementation and Support of Information Systems (3)  
 CSIS 435 Compilers (4)  
 CSIS 446 Decision Support Systems (3)  
 CSIS 450 Programming Languages (3)

CSIS 469 Internship (1-12)  
CSIS 490 Topics in Computer Science and Information Systems (1-3)  
CSIS 492 Senior Seminar (1)  
CSIS 494 Undergraduate Research (1-3)

## **B.S. Degree in Computer Science**

To receive the B.S. Degree in Computer Science, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Students will be able to competently develop computer software.
- Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech.
- Students will possess competitive and comprehensive discipline-specific content knowledge.
- Students will be able to solve problems in their careers.

### **Core Requirements (44 credits)**

CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CSIS 252 Introduction to Computers and Programming II (3)  
CSIS 304 Databases (3)  
CSIS 316 Ethics in the Information Age (3)  
CSIS 320 Architecture (4)  
CSIS 340 Software Engineering (3)  
CSIS 349 Networks and Data Communications (3)  
CSIS 349L Networks and Data Communications Lab (1)  
CSIS 352 Advanced Concepts in Programming (3)  
CSIS 430 Operating Systems (4)  
CSIS 435 Compilers (4)  
CSIS 446 Intelligent and Predictive Systems (3)  
CSIS 450 Programming Languages (3)  
CSIS 492 Senior Seminar (1)

### **Related Requirements (20 credits)**

COMM 100 Speech Communication (3)  
ENGL 387 Technical Report Writing (3)  
MATH 261 Calculus I (4) **or**  
MATH 229 Topics in Calculus (3)  
MATH 210 Concepts from Discrete Mathematics (3)  
MATH 234 Introduction to Probability and Statistics (3) **or**  
MATH 335 Intermediate Probability and Statistics I (3)  
CHEM 150/CHEM 150L General Chemistry I and Lab (4) **or**  
PHYS 160 College Physics I and Lab (4) **or**  
PHYS 200 General Physics I and Lab (4)

### **Restricted Electives (12 credits)**

Students must choose twelve elective credits from the listed courses. At least nine of the twelve elective



credits must be at or above the 300 level.

CSIS 290 Special Topics (1-3)  
CSIS 311 Server-Side Scripting (3)  
CSIS 335 Graphical User Interface Programming (3)  
CSIS 336 C#.Net Programming (3)  
CSIS 341 System and Network Administration (3)  
CSIS 360 Linux Programming and Development Tools (3)  
CSIS 405 E-Commerce Technology (3)  
CSIS 433 Design, Implementation and Support of Information Systems (3)  
CSIS 441 Network Security (3)  
CSIS 469 Internship (up to 3 applied)  
CSIS 490 Topics in Computer Science and Information Systems (1-3)  
CSIS 494 Undergraduate Research (1-3)

### **Minor in Computer Information Systems – 26 credits**

CSIS 145 Introduction to Information Systems (1)  
CSIS 241 Introduction to Web Design & Development (3)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CSIS 304 Databases (3)  
CSIS 340 Software Engineering (4)  
ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)

Select one course from this list:

CSIS 252 Introduction to Computers and Programming II (3)  
CSIS 349 Networks and Data Communications (3)  
CSIS 433 Design, Implementation and Support of Information Systems (3)

### **Minor in Computer Information Technology – 23 credits**

CSIS 103 Computer Concepts and Applications (3) **or**  
CSIS 104 Spreadsheet and Database Applications (3)  
CSIS 145 Introduction to Information Systems (1)  
CSIS 241 Introduction to Web Design & Development (3)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CSIS 222 Computer Maintenance (1)  
CSIS 311 Server-Side Scripting (3)  
CSIS 341 System and Network Administration (3)  
CSIS 349 Network and Data Communications (3)

### **Minor in Computer Science – 24 credits**

CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CSIS 252 Introduction to Computers and Programming II (3)  
CSIS 352 Advanced Concepts in Programming (3)

12 credits of electives to be chosen from the list of required or restricted elective courses for the Computer Science major.

## **Economics, Law and Politics**

*The Department of **Economics, Law and Politics** offers majors in Economics, International Studies, Paralegal, and Political Science. Minors are offered in Economics, Political Science, and Pre-Law.*

Co-Chairs for the Economics, Law and Politics Department: Tracy Gompf and Paul Kramer

### **Economics**

**MacLean Hall 380, (218) 477-2842**

**Chair of Economics, Law and Politics:** Paul Kramer

**Faculty:** Steven Bolduc, Oscar Flores-Ibarra, Tonya Jo Hansen, Gregory Stutes

The major and minor programs in economics offer a set of required and elective courses designed to develop students' abilities for analyzing complex choices in a rapidly changing world. Two emphases within the major in economics, a traditional liberal arts program and business economics are available. Both prepare students for careers in finance, private business, education and government.

---

### **Political Science**

**MacLean Hall 380, (218) 477-2842**

**Faculty:** Philip Baumann, Barbara Headrick, Paul Kramer

The ancient Greek philosopher, Aristotle, indicated that among all areas of human inquiry, political science is the "master science". Not only is the study of politics challenging, rewarding, and important, but it often leads to careers in foreign and domestic government service, higher education and the practice of law.

---

### **International Studies**

**MacLean Hall 380, (218) 477-2842**

**Faculty:** A variety of faculty from different disciplines teach this interdisciplinary major.

The International Studies major is designed around a core of required international topics across the curriculum at the lower division combined with upper level specialties in a variety of disciplines including political science, anthropology, geosciences, history, economics and philosophy.

This program is ideal for those who wish to develop a career involving various kinds of international relations such as careers with the Foreign Service, non-governmental agencies, international organizations such as the U.N., IMF, NATO, EU, or working in international trade for multinational companies. It is also excellent preparation for participation in international volunteer organizations such as the Peace Corps and non-governmental organizations (NGO's).

---

### **Paralegal**

**MacLean Hall 380, (218) 477-2842**

**Program Coordinator:** Tracy Gompf

**Faculty:** Jean Hannig, Deborah Schaefer Kukowski

The Paralegal major is a professional four-year Bachelor of Science degree. The major is guided by an advisory group composed of university and community members. To complete the major, students must meet the requirements of the core, satisfy at least one of the two areas of emphasis, and complete at least six credits from the other area of emphasis. To receive the Bachelor of Science degree in Paralegal, students must attain a minimum GPA of 2.25 in courses required to complete the Paralegal major.

***\*\*\*Paralegals may not provide legal services directly to the public except where authorized by law.***

## **B.A. Degree in Economics**

To receive the B.A. Degree in Economics, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Students should demonstrate awareness of a broad range of sub-fields in economics.
- Students should demonstrate knowledge of basic economics concepts.
- Students should be able to conduct original research in economics.
- Students should demonstrate effective presentation skills.
- Students should demonstrate effective writing skills.
- Students should demonstrate the ability to apply quantitative tools.

### **Core Requirements (21 credits)**

ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
ECON 302 Intermediate Microeconomic Theory (3)  
ECON 304 Intermediate Macroeconomic Theory (3)  
ECON 370 Quantitative Economic Analysis (3)  
ECON 425 International Trade and Finance (3)  
ECON 492 Economics Seminar (3)

### **Related Requirements (24 credits)**

In addition to the listed courses, students must take six elective credits in Accounting or Computer Science. Students planning to do graduate work in Economics are encouraged to take additional mathematics courses.

ACCT 230 Principles of Accounting I (3)  
COMM 100 Speech Communication (3)  
CSIS 103 Computer Concepts and Applications (3)  
ENGL 387 Technical Report Writing (3)  
MATH 229 Topics in Calculus (3)  
MATH 234 Introduction to Probability and Statistics (3)

### **Restricted Electives (15 credits)**

Fifteen additional elective credits in Economics courses are required. ECON 100 and 300 may not be used as electives for Economic majors. Select from the following:

ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)  
ECON 315 Government and Business (3)  
ECON 320 Money and Banking (3)

ECON 340 The Gendered Economy (3)  
ECON 350 Public Finance (3)  
ECON 390 Topics in Economics (1-3)  
ECON 415 Industrial Organization and Public Policy (3)  
ECON 416 Labor Economics (3)  
ECON 469 Internship (1-12) ECON 497 Independent Study in Economics (1-3)

### **Business Economics Emphasis**

#### **Program Requirements (27 credits)**

ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
ECON 302 Intermediate Microeconomic Theory (3)  
ECON 304 Intermediate Macroeconomic Theory (3)  
ECON 315 Government and Business (3) **or**  
ECON 415 Industrial Organization and Public Policy (3)  
ECON 320 Money and Banking (3)  
ECON 370 Quantitative Economic Analysis (3)  
ECON 425 International Trade and Finance (3)  
ECON 492 Economics Seminar (3)

#### **Related Requirements (6 credits)**

In addition to the listed courses, students must also take six elective credits in Accounting or Computer Science. Students planning to do graduate work in Economics are encouraged to take additional mathematics courses.

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)  
ACCT 280 Legal Environment of Business (3)  
COMM 100 Speech Communication (3)  
CSIS 103 Computer Concepts and Applications (3)  
ENGL 387 Technical Report Writing (3)  
FINC 340 Financial Management (3)  
MATH 229 Topics in Calculus (3) OR  
MATH 261 Calculus I (4)  
MATH 234 Introduction to Probability and Statistics (3)  
MGMT 260 Principles of Management (3)  
MGMT 370 Management Information Systems (3)  
MKTG 270 Principles of Marketing (3)

#### **Restricted Electives (9 credits)**

Students must complete nine elective credits in Economics. ECON 100 does not count as an elective.

### **B.S. Degree in International Studies**

To receive the B.S. Degree in International Studies, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### Student Learning Outcomes

- Discuss how processes of globalization impact human rights.
- Describe linkages between globalization, migration and development.
- Discuss the impact of cultural context on one's own world view.
- Discuss how international experience has affected one's own understanding of the world.
- Demonstrate an ability to think critically.
- Demonstrate an ability to analyze issues from an interdisciplinary perspective.
- Demonstrate an ability to engage in thoughtful discussion of complex global issues and challenges.

### Core Requirements (21 credits)

This core is required of all students who major in one of the International Studies emphases: Development or Diplomacy.

ANTH 110 Introduction to Cultural Anthropology (3)

ECON 204 Principles of Economics II: Macro (3)

GEOS 111 Cultures and Regions (3)

HIST 105 World History II (3)

INTL 101 Introduction to Global Issues (3) **or**

POL 105 Making Sense of Politics (3)

PHIL 120 World Religions (3)

POL 160 International Relations (3)

### Restricted Electives (6-8 credits)

Students must complete two courses from the following list in consultation with the Program Coordinator.

HIST 205 Introduction to Historical Methods (3)

POL 310 Political Science Research Methods (3)

ECON 370 Introduction to Econometrics (3)

GEOS 205 Thinking Spatially (3)

GEOS 207 GPS Field Techniques (3)

GEOS 210 Cartography (3)

ENGL 286 Writing for the Workplace (3)

ENGL 387 Technical Report Writing (3)

CHIN 101 Beginning Chinese I (4)

CHIN 102 Beginning Chinese II (4)

JAPN 101 Beginning Japanese I (4)

JAPN 102 Beginning Japanese II (4)

SPAN 101 Beginning Spanish I (3)

SPAN 102 Beginning Spanish II (3)

Students who complete language courses at MSUM of a higher level of proficiency can petition the Program Coordinator to have those courses counted to meet this requirement and are encouraged to do so if applicable. Students will NOT be given credit for previous language proficiency, only for college credits either taken on campus or transferred from another baccalaureate institution. This requirement will not be waived by demonstrating language proficiency. Students with previous language proficiency who cannot or do not wish to take further coursework in a proficient language or coursework in another language will take the statistics and/or GIS courses, or courses in English writing.

## **Diplomacy Emphasis**

### **Program Requirements (15 credits)**

Students completing the Diplomacy Emphasis must complete:

POL 349 Great Power Politics (3)

Students must also complete 12 credits from the following list:

ANTH 265 Language and Cultures (3)

GEOS 310 U.S. and Canada (3)

GEOS 410 Eastern Europe and Russia (3)

HIST 302 East Asian History II (3)

HIST 346 Modern China (3)

HIST 347 Modern Japan (3)

PHIL 322 Religious Traditions in a Global Society (3)

PHIL 357 Social and Political Philosophy (3)

PHIL 358 Peace and War (3)

POL 315 Political Thought (3)

POL 350 Comparative Governments of Western Europe (3)

POL 352 Political Problems in Developing Countries (3)

POL 356 Russia and the Global Cold War (3)

POL 360 American Foreign Policy (3)

POL 363 Public International Law (3)

POL 370 Understanding International Security (3)

## **Development Emphasis**

### **Program Requirements (15 credits)**

Students completing the Development track must complete:

GEOS 320 Economic Geography (3)

Students completing the Development track must also complete 12 credits from the following list:

ANTH 306 Medical Anthropology (3)

ANTH 307 Ecological Anthropology (3)

ANTH 308 Migration and Human Adaptation (3)

ANTH 313 Traditional Cultures (3)

ANTH 380 Contemporary Africa (3)

ECON 300 Global Economic Issues (3)

ECON 425 International Trade and Finance (3)

HIST 304 Africa in World History (3)

HIST 334 History of Latin America II (3)

HIST 336 History of Mexico (3)

HIST 337 History of Peru (3)

HIST 373 Monsoon Asia: People and the Environment (3)

HIST 379 Environmental History (3)

POL 314 War and the Environment (3)

POL 345 Environmental Politics (3)  
POL 361 International Political Economy (3)

## **B.S. Degree in Paralegal**

To receive the B.S. Degree in Paralegal, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits). A GPA of 2.25 or higher required for all major coursework in this program. \*\*\*Paralegals may not provide legal services directly to the public except where authorized by law.

### **Student Learning Outcomes**

- Student knows substantive and procedural law applicable to the course.
- Student can identify legal issues.
- Student can analyze legal issues.
- Student can research the law.
- Student can draft legal memoranda and/or trial or appellate court briefs.
- Student can draft documents and pleadings.
- Student communicates effectively orally and in writing.
- Student understands the rules of legal ethics.
- Student can obtain information by interviewing and investigation.
- Student understands roles and relationships within a legal services delivery team.

### **Core Requirements (34 credits)**

Majors must complete the core requirements and at least one area of emphasis. This requires 12 credits from either Litigation or Transactions. In addition, all majors must complete at least 6 credits from one other area of emphasis. Credits in excess of the minimum requirements are applied to general electives.

PARA 125 Introduction to Paralegal (3)  
PARA 251 Legal Research and Writing (3)  
PARA 310 Civil Procedure I (3)  
PARA 320 Family Law (3)  
PARA 325 Interviewing (3)  
PARA 331 Debtor-Creditor/Bankruptcy Law (3)  
PARA 375 Legal Ethics (3)  
PARA 405 Wills, Estates and Taxation (3)  
PARA 416 Elder Law (3)  
PARA 425 Advanced Legal Research and Writing (3)  
PARA 469 Internship (4-12)

### **Transactions Emphasis**

#### **Program Requirements (12 credits)**

ACCT 280 Legal Environment of Business (3)  
PARA 350 Contract Law and Drafting (3) **or**  
ACCT 306 Contracts and Business Entities (3)  
PARA 321 Employment Law (3)  
PARA 380 Real Estate (3)

### Related Requirements (6 credits)

Students must complete at least six credits in one other area of emphasis.

### **Litigation Emphasis**

#### Program Requirements (12 credits)

PARA 346 Public Benefits (3)

PARA 410 Civil Procedure II (3)

PARA 420 Criminal Litigation (3)

PARA 435 Personal Injury (3)

### Related Requirements (6 credits)

Students must complete at least six credits in one other area of emphasis.

## **B.A. Degree in Political Science**

To receive the B.A. Degree in Political Science, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### Student Learning Outcomes

- Students demonstrate familiarity with major concepts, institutions and theories in political science.
- Students can apply knowledge of major concepts, institutions and theories in political science to political events and government policymaking.
- Students demonstrate familiarity with the basic goals, means and critiques of political science research.
- Students demonstrate effective writing skills.

### Core Requirements (24 credits)

POL 105 Making Sense of Politics (3)

POL 120 American National Government and Politics (3)

POL 160 International Relations (3)

POL 210 Introduction to Political Science (3)

POL 230 Introduction to the Law (3) **or**

POL 322 Executive/Legislative Process (3)

POL 310 Political Science Research Methods (3)

POL 340 Public Administration (3) **or**

POL 341 Public Policy (3)

POL 349 Great Power Politics (3) **or**

POL 350 Comparative Governments of Western Europe (3)

### Electives (18 credits)

Students must take sufficient electives in Political Science courses to bring the total Political Science credits to 42.

## **Minor in Economics – 21 credits**

ECON 202 Principles of Economics I: Micro (3)

ECON 204 Principles of Economics II: Macro (3)



ECON 300 Global Economic Issues (3) **or**  
ECON 425 International Trade and Finance (3)  
ECON 302 Intermediate Microeconomic Theory (3) **or**  
ECON 304 Intermediate Macroeconomic Theory (3)

Nine approved credits in Economics courses. ECON 100 does not count as an elective. Select from the following:

ECON 300 Global Economic Issues (3) **or**  
ECON 425 International Trade and Finance (3)  
ECON 302 Intermediate Microeconomic Theory (3) **or**  
ECON 304 Intermediate Macroeconomic Theory (3)  
ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)  
ECON 320 Money and Banking (3)  
ECON 350 Public Finance (3)  
ECON 390 Topics in Economics (1-3)  
ECON 416 Labor Economics (3)  
ECON 469 Internship (1-12)  
ECON 494 Undergraduate Research in Economics (1-3)

### **Minor in Political Science – 21 credits**

POL 120 American National Government and Politics (3)  
POL 210 Introduction to Political Science (3)

Students must earn at least fifteen credits of Political Science electives, nine of which must be at the 300 level or above.

### **Minor in Pre-Law – 24 credits**

The pre-law minor is a multidisciplinary minor for students considering the pursuit of a law degree.

POL 230 Introduction to Law (3)  
ECON 204 Principles of Economics I (3)  
ECON 315 Government and Business (3) **or**  
ECON 350 Public Finance (3)  
PARA 251 Legal Research and Writing (3)  
PARA 310 Civil Procedure I (3)  
PHIL 110 Practical Reasoning (3) **or**  
PHIL 340 Symbolic Logic (3)  
PHIL 215 Contemporary Moral Issues (3) **or**  
PHIL 318 Professional Ethics (3)  
POL 315 Political Thought (3) **or**  
POL 332 Constitutional Law I: Institutional Powers & Constraints (3)

### **English**

**English Department**

**Weld Hall 216, (218) 477-2235**

**Chair:** Michael McCord

**Faculty:** Kevin Carollo, Sheila Coghill, Alan Davis, Tim Decker, Lin Enger, Laura Fasick, Jill Frederick, Yahya

Frederickson, Stephen Hamrick, Susan Imbarrato, Elizabeth Kirchoff, Katherine Meiners, Liz Rowse, Sharon Scapple, Thomas Tammaro, Kevin Zepper, Richard Zinober.

*The **Department of English** offers majors in English, English and Mass Communications, and Communication Arts and Literature Education. Areas of emphasis are in Literature, Writing, and Integrated English & Publishing. Minors offered are in English and English writing. Certificates offered are in Professional Writing and Publishing.*

Requirements for majors, dual majors, and minors in English are set forth in detail below. Anyone who wishes to major or minor in English must see the chairperson and be assigned an advisor. Because of the significant number of electives permitted, English majors and minors must consult their advisors each semester to plan programs which are both academically acceptable and personally satisfying. Students who wish to set up individualized majors including English courses (for instance, Comparative Literature or language studies) should consult the chair. **English 300, Introduction to Literary Studies, is a prerequisite to all core courses.**

The B.A. and B.S. (teaching) programs presently have similar core requirements; but among the other differences, the B.S. program includes coursework prescribed by the Minnesota State Board of Education for a teaching major in English on the secondary level.

Students intending to pursue graduate study are advised to take more than the minimum number of 300 and 400-level courses. They are also advised to make themselves proficient in at least one foreign language. Only English courses in which a student has earned “C-” or higher will be accepted to fulfill requirements within the major.

All majors will take one designated Capstone seminar, preferably in their senior year, which serves as a culminating course for their academic study in English. Literature majors will take English 496. Writing majors and students in Integrated English & Publishing may use an English 487 or 488 seminar as their Capstone seminar. English Education majors take English 491. All students should consult with their advisors for help in selecting an appropriate Capstone course.

### **Certificate in Publishing**

The purpose of the Certificate in Publishing is to prepare students to work within the unique framework of the publishing industry, and to design and deliver an educational experience that allows students to learn about acquiring, editing, publishing and promoting new literature. As students at MSUM and as interns associated with New Rivers Press at MSUM, completing the certificate would develop a set of skills that will qualify a student for entry level employment in the publishing industry.

### **Certificate in Professional Writing**

The Certificate in Professional Writing provides the opportunity for students, professionals, and business people to enhance their communication skills and credentials with a special emphasis on coursework tailored to their work settings and careers. The Certificate in Professional Writing is designed for students pursuing or holding a bachelor's degree from MSUM or an equivalent university.

### **B.A. Degree in English**

To receive the B.A. Degree in English, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

## Student Learning Outcomes

- Perform critical analysis and/or creative achievement within the context of literary tradition.
- Develop knowledge of major authors, works, and traditions of literature.
- Develop reading and writing skills that find, draw upon, and engage with authoritative scholarship within the discipline.
- Use standard documentation procedures in projects involving research and writing.
- Discuss literary and historical issues with peers from a variety of critical or creative perspectives.

## Core Requirements (15 credits)

**English 300 is a prerequisite for all Core courses.**

ENGL 300 Introduction to Literary Studies (3)

ENGL 311 Major British Writers I (3)

ENGL 314 Topics in Shakespeare (3)

ENGL 371 Survey of American Literature I (3)

ENGL 380 World Literature (3)

## Literature Emphasis

### Program Requirements (3 credits)

ENGL 492 Literature Capstone Seminar (3)

### Related Requirements (21 credits)

#### **II. Select 3 credits from this category:**

ENGL 312 Major British Writers II (3)

ENGL 330 Individual Authors (2-3)

ENGL 372 Survey of American Literature II (3)

#### **III. Select 6 credits from this category:**

ENGL 301 Medieval British Literature (3)

ENGL 321 Early American Literature (3)

ENGL 322 19th Century American Literature (3)

ENGL 323 20th-21st Century American Literature (3)

#### **IV. Select 3 credits from this category:**

ENGL 246 Women in Literature (3)

ENGL 352 Native American Literature (3)

ENGL 356 African American Literature (3)

#### **V. Select 9 credits from this category: (Students may instead use 3 credits -- 1 course -- from Sections II, III, or IV. In that case, only 6 credits will be required from Section V.)**

ENGL 317 Personal Lives, National Affairs (3)

ENGL 325 Literature for Young Readers (3)

ENGL 332 Film and the Novel (3)

ENGL 234 Mythology (3)

ENGL 335 World Mythology (3)

ENGL 340 Genre Studies (3)

ENGL 343 Drama II (3)  
ENGL 346 Virtue and Vice in Gothic Storytelling (3)  
ENGL 390 Special Topics (1-4)  
ENGL 407 Big City, Big Impact (3)  
ENGL 410 Studies in British Literature (3)  
ENGL 417 Issues of Death & Grief: Creative Non-Fiction of Life & Loss (3)  
ENGL 435 Nature Writing/Ecocriticism (3)  
ENGL 445 Holocaust Literature (3)  
ENGL 463 History of the English Language (3)  
ENGL 469 Internship (1-12)

### **Writing Emphasis**

#### **Program Requirements (3 credits)**

##### **Select one of these 3 credit Capstone courses:**

ENGL 487 Advanced Technical Report Writing (3)  
ENGL 488 Advanced Creative Writing (3)

#### **Related Requirements (21 credits)**

##### **II. Select 3 credits from this category:**

ENGL 312 Major British Writers II (3)  
ENGL 330 Individual Authors (2-3)  
ENGL 372 Survey of American Literature II (3)

##### **III. Select 3 credits from this category:**

ENGL 286 Writing for the Workplace (3)  
ENGL 288 Introduction to Creative Writing (3)

##### **IV. Select 3 credits from this category:**

ENGL 387 Technical Report Writing (3)  
ENGL 388 Creative Writing (3)

##### **V. Select 9 credits from this category:**

ENGL 285 Scriptwriting (3)  
ENGL 413 Writing About Art (3)  
ENGL 423 Writing for Children (3)  
ENGL 425 Grant Proposal Writing (3)  
ENGL 452 Craft Seminar (3)  
ENGL 490 Special Topics (1-4)

##### **VI. Select 3 credits from this category: (Students may instead use 3 credits -- 1 course -- from Section II. In that case, no credits will be required from Section VI.)**

ENGL 301 Medieval British Literature (3)  
ENGL 317 Personal Lives, National Affairs (3)  
ENGL 321 Early American Literature (3)  
ENGL 322 19th Century American Literature (3)  
ENGL 323 20th-21st Century American Literature (3)  
ENGL 325 Literature for Young Readers (3)

ENGL 332 Film and the Novel (3)  
ENGL 234 Mythology (3)  
ENGL 335 World Mythology (3)  
ENGL 340 Genre Studies (3)  
ENGL 343 Drama II (3)  
ENGL 246 Women in Literature (3)  
ENGL 352 Native American Literature (3)  
ENGL 356 African American Literature (3)  
ENGL 390 Special Topics (1-4)  
ENGL 407 Big City, Big Impact (3)  
ENGL 410 Studies in British Literature (3)  
ENGL 417 Issue of Death & Grief: Creative Non-Fiction of Life & Loss (3)  
ENGL 435 Nature Writing/Ecocriticism (3)  
ENGL 445 Holocaust Literature (3)  
ENGL 463 History of the English Language (3)  
ENGL 469 Internship (1-12)

### **Integrated English and Publishing Emphasis**

#### **Program Requirements (3 credits)**

##### **Select one of these 3 credit Capstone courses:**

ENGL 487 Advanced Technical Report Writing (3)  
ENGL 488 Advanced Creative Writing (3)

#### **Related Requirements (21 credits)**

##### **II. Select 3 credits from this category:**

ENGL 312 Major British Writers II (3)  
ENGL 330 Individual Authors (2-3)  
ENGL 372 Survey of American Literature II (3)

##### **III. Select 3 credits from this category:**

ENGL 286 Writing for the Workplace (3)  
ENGL 288 Introduction to Creative Writing (3)  
ENGL 387 Technical Report Writing (3)  
ENGL 388 Creative Writing (3)

##### **IV. Select 3 credits from this category:**

ENGL 285 Scriptwriting (3)  
ENGL 413 Writing About Art (3)  
ENGL 423 Writing for Children (3)  
ENGL 425 Grant Proposal Writing (3)  
ENGL 452 Craft Seminar (3)  
ENGL 457 Literary Editing (3)  
ENGL 490 Special Topics (1-4)

**V. Select 6 credits from this category: (Students may instead use 3 credits -- 1 course -- from Section II. In that case, only 3 credits will be required from Section V.)**

ENGL 301 Medieval British Literature (3)  
ENGL 317 Personal Lives, National Affairs (3)  
ENGL 321 Early American Literature (3)  
ENGL 322 19th Century American Literature (3)  
ENGL 323 20th-21st Century American Literature (3)  
ENGL 325 Literature for Young Readers (3)  
ENGL 332 Film and the Novel (3)  
ENGL 234 Mythology (3)  
ENGL 335 World Mythology (3)  
ENGL 340 Genre Studies (3)  
ENGL 343 Drama II  
ENGL 246 Women in Literature (3)  
ENGL 352 Native American Literature (3)  
ENGL 356 African American Literature (3)  
ENGL 390 Special Topics (1-4)  
ENGL 407 Big City, Big Impact (3)  
ENGL 410 Studies in British Literature (3)  
ENGL 417 Issue of Death & Grief: Creative Non-Fiction of Life & Loss (3)  
ENGL 435 Nature Writing/Ecocriticism (3)  
ENGL 445 Holocaust Literature (3)  
ENGL 463 History of the English Language (3)  
ENGL 469 Internship (1-12)

**VI. Select 6 credits from this category:**

ENGL 402 Introduction to Publishing (3)  
ENGL 462 Practicum in Publishing (3)

**B.A. Degree in English & Mass Communications**

A student's B.A. degree will include 33 credits earned in the Department of English and 33 credits earned in the School of Communication and Journalism. The dual major is available for those wishing to concentrate on writing. A student may choose to focus the writing experience to coincide with an interest in advertising, broadcast journalism, communication studies, documentary journalism, integrated advertising and public relations, photojournalism, multimedia journalism, or public relations. A student may select his/her major advisor from either the Department of English or the School of Communication and Journalism. Students are encouraged to get advising from faculty in both program units.

Core Requirements (36 credits)

**ENGL 300 is a prerequisite for all Core courses.**

ENGL 300 Introduction to Literary Studies (3)  
ENGL 311 Major British Writers I (3)  
ENGL 314 Topics in Shakespeare (3)  
ENGL 371 Survey of American Literature I (3)  
ENGL 380 World Literature (3)  
COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)

COMM 324 International Communications (3)  
COMM 400 Mass Media Ethics and Issues (3)  
COMM 403 Communications Law (3)

#### Electives (18 credits)

Students must take 9 elective credits in English courses and 9 elective credits in communications courses. The English elective credits must be at the 300 level or above and at least one course must be at the 400 level. Further, at least one course must be in American literature and at least one course must be in British literature. The English electives should be chosen in close consultation with an advisor from the English Department. The communications electives must also be chosen in close consultation with a faculty advisor in the School of Communication and Journalism department and may be drawn from any COMM or LEAD rubric.

#### Restricted Electives (12 credits)

Students must choose nine credits from the listed English courses and must also choose a three credit communications course from those listed.

ENGL 285 Scriptwriting (3)  
ENGL 288 Introduction to Creative Writing (3)  
ENGL 387 Technical Report Writing (3)  
ENGL 388 Creative Writing (3)  
ENGL 395 Theory and Methods of Tutoring (3)  
ENGL 487 Advanced Technical Report Writing (3)  
COMM 306 Advertising Copywriting (3) **or**  
COMM 307 Writing for Public Relations (3) **or**  
COMM 309 Reporting (3)  
COMM 306, COMM 307, or COMM 309 are writing intensive options for the major.

### **B.S. Degree in Communication Arts & Literature Education**

To receive the B.S. Degree in Communication Arts and Literature Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits and a 2.5 GPA is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits). A grade of C- or above is required in all coursework for this program.

#### **Student learning outcomes for the English Teaching majors (BS) are from the National Council for Teaching of English Guidelines**

- Demonstrate a respect for the worth and contributions of all learners.
- Show an understanding of language acquisition and development.
- Demonstrate the image of language and visual images on thinking and composing.
- Demonstrate how to respond to and interpret what is read in different ways.
- Use a wide range of writing strategies to generate meaning and to clarify understanding.
- Show knowledge of a broad historical and contemporary spectrum of United States, British, and world literatures.
- Recognize the influence of media on culture and on people's actions and communication.
- Use major sources of research and theory to understand the relationship between research and practice.
- Examine, evaluate, and select resources which support the teaching of English language arts.

### Core Requirements (18 credits)

ENGL 300 Introduction to Literary Studies (3)  
ENGL 311 Major British Writers I (3)  
ENGL 314 Topics in Shakespeare (3)  
ENGL 371 American Literature Survey I (3)

Select ONE of the following courses (3 credits)  
ENGL 280 World Literature: East and West (3) **or**  
ENGL 380 World Literature (3)

Select ONE of the following courses (3 credits)  
ENGL 312 Major British Writers II (3)  
ENGL 330 Individual Authors (3)  
ENGL 372 American Literature Survey II (3)

### Program Requirements (21 credits)

ENGL 491 is the capstone course for students in this major. Students must also fulfill all teacher licensure requirements.

COMM 415 Teaching Methods: Communication Studies (3)  
ENGL 357 New Media and the CA/L Classroom (3)  
ENGL 365 Language and Learning (3)  
ENGL 374 Theory & Methods: Writing, Grades 5-12 (3)  
ENGL 484 Theory & Methods CA/L Grades 5-8 (3)  
ENGL 491 Theory & Methods CA/L Grades 9-12 (3)  
ENGL 493 Grammars of English (3)

### Related Requirements (36 credits)

These courses are required for teacher licensure

#### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

### Restricted Electives (6 credits)

Students must select two additional 3-credit courses in English at either the 300 or 400 level.



### **Minor in English – 24 credits**

ENGL 300 Introduction to Literary Studies (3)

**\*\*This is the prerequisite for all other core courses in the minor.\*\***

ENGL 311 Major British Writers I (3)

ENGL 314 Topics in Shakespeare (3)

ENGL 371 Survey of American Literature I (3)

ENGL 380 World Literature (3)

Students must take nine credits in English electives. At least one course must be at the 300 or 400 level in British literature and at least one course must be at the 300 or 400 level in American literature.

### **Minor in English-Writing – 18 credits**

Students must take at least twelve credits chosen from the following courses. A maximum of three credits hours from ENGL 469 is applicable to this minor.

ENGL 285 Scriptwriting (3)

ENGL 286 Writing for the Workplace (3)

ENGL 288 Introduction to Creative Writing (3)

ENGL 387 Technical Report Writing (3)

ENGL 388 Creative Writing (3)

ENGL 395 Theory and Methods of Tutoring (3)

ENGL 469 Internship (1-12)

ENGL 488 Advanced Creative Writing (3)

Students must take six credits in English elective courses in consultation with Minor advisor. Each student is encouraged to assemble a portfolio of writing samples to present to prospective employers.

### **Minor in Religious Studies – 21 credits**

PHIL 120 World Religions (3)

PHIL 301 Philosophy of Religion (3)

HUM 320 Humanities East and West (3)

Students must choose twelve credits from the listed electives. Students may substitute other courses, such as topics courses, in consultation with the student's advisor and with approval by the Coordinator of Religious Studies. Electives must be drawn from at least three different disciplines.

ANTH 314 American Indian Worldviews (3)

ANTH 316 Magic, Witchcraft and Belief (3)

ANTH 318 Archaeology and the Bible (3)

ART 411 Medieval Art (4)

ART 420 Renaissance Art (4)

ENGL 318 Christian Bible as Literature (3)

ENGL 234 Mythology (3)

HIST 244 Women in World Religions (3)

HIST 317 Medieval Europe (4)

HIST 385 History of Christianity (4)

PHIL 302 Buddhist Philosophy (3)

PHIL 304 Medieval Philosophy (3)

PHIL 322 Religious Traditions in Our Global Society (3)

SOC 330 Sociology of Religion (3)

### **Certificate in Professional Writing – 15 credits**

The Certificate in Professional Writing provides the opportunity for students, professionals, and business people to enhance their communication skills and credentials with a special emphasis on coursework tailored to their work settings and careers.

CSIS 103 Computer Concepts and Applications (3)

COMM 220 Layout and Typography I (3)

ENGL 286 Writing in the Workplace (3)

ENGL 387 Technical Report Writing (3)

COMM 301 Business and Professional Communications (3)

### **Certificate in Publishing – 12 credits**

As a joint venture among the Departments of English and the School of Communication and Journalism, the goal of the Certificate in Publishing is to introduce students to the publishing industry through writing and editing experiences.

- Demonstrate an awareness and understanding of the principles of constructing a text designed for publication.
- Copy-edit texts in accordance to the standards employed in the publishing industry.
- Demonstrate an ability to work collaboratively as a member of a publications team.
- Demonstrate entry-level professional competency through the successful completion of the practicum in publishing afforded through the required curriculum.

Students must complete at least 3 credits of practicum.

COMM 402 Introduction to Publishing (3)

COMM 462 Practicum in Publishing (3)

Students must complete at least 6 credits chosen from the following list of electives:

ENGL 288 Introduction to Creative Writing (3)

ENGL 388 Creative Writing (3) **\*Must take pre-req ENGL 288**

ENGL 488 Advanced Creative Writing (3) **\*Must take pre-req ENGL 388**

ENGL 490 Special Topics (1-3)

ENGL 486 Tutorial (1-3)

COMM 307 Writing for Public Relations (3)

COMM 309 Reporting (3)

COMM 321 Copy Editing (3)

COMM 327 Editing Public Relations Copy (3)

COMM 381 Sports Information & the Media (3)

COMM 390 Special Topics (3)

COMM 405 Writing for the Web (3)

COMM 406 Feature Writing (3)

COMM 407 Magazine Writing (3)

COMM 469 Internship (1-6)

COMM 490 Special Topics (3)  
COMM 497 Individual Study (1-3)

### **Communication Arts/Literature Middle Level (5-8) Teaching Endorsement**

Successful completion of this program will qualify students to apply for a middle level Minnesota teaching endorsement in Communication Arts/Literature, which will allow them to extend their Elementary or Secondary teaching license so that they can teach English/Language Arts in grades 5-8

Students who seek this endorsement must be admitted to a degree program in either A) Elementary Inclusive Education or B) secondary education in any subject area OR students who seek this endorsement must already be licensed to teach either Elementary Inclusive Education or secondary education in any subject area.

ENGL 280 World Literature East and West (3)  
ENGL 357 New Media and the CA/L Classroom (3)  
ENGL 365 Language and Learning (3)  
ENGL 374 Theory and Methods: Writing Grades 5-12 (3)  
ENGL 493 Grammars of English (3)  
ENGL 484 Theory and Methods: CA/L Grades 5-8 (3)

ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 460S Student Teaching (4) **OR**  
STL 428 Building Partnerships (3)  
ED 498 The Professional Teacher in the Classroom (3)

COMM 415 Teaching Methods: Communication Studies (3)

### **Health & Physical Education**

**Health and Physical Education Department**

**Alex Nemzek Hall 103, (218) 477-2445**

**Chair:** Dawn Hammerschmidt

**Faculty:** Jay Albrecht, James Gemar, Wendy Frappier, Julie Knutson

MSUM's Health and Physical Education (HPE) Department offers programs for students who are interested in positions in teaching health and/or physical education in schools, exercise science, athletic training or coaching.

#### **Bachelor of Science in Physical Education: Teaching**

Physical education teaching graduates are employed as K-12 physical education teachers, developmental adapted physical education teachers, and athletic coaches. A developmental adapted physical education licensure or coaching minor enhances public school employment opportunities. Other physical education teaching graduates assume jobs in a variety of recreational and fitness fields. Competitive admittance is dependent upon completion of SARTE admittance.

#### **Bachelor of Science in Health Education**

School health educators are licensed to teach health education in the public or private schools at 5-12 level. Students obtaining a health education teaching degree are also eligible for positions in the community setting. Competitive admittance is dependent upon completion of SARTE admittance.

## **Bachelor of Science in Exercise Science**

The exercise science major prepares students for careers in fitness, exercise science, wellness and health. The major will also prepare students for graduate school programs in exercise science, exercise physiology or cardiac rehabilitation. One of the goals of the exercise science program is to prepare students to sit for certification by the American Council on Exercise, National Strength and Conditioning Association, American College of Sports Medicine, and National Academy of Sport Medicine.

## **Minnesota State University Moorhead will no longer be accepting students into the baccalaureate Athletic Training program.**

The National Athletic Trainers' Association (NATA) Board of Directors and the Commissioners of the Commission on Accreditation of Athletic Training Education (CAATE), with the full support of the Board of Certification and the NATA Research and Education Foundation, have agreed to establish the professional degree in athletic training at the master's level.

MSU Moorhead is proud of its robust history of graduating exceptionally prepared alumni to serve as athletic trainers all across the country. We are investigating the opportunity of offering a master's level athletic training program in the future.

## **B.S. Degree in Exercise Science**

The Exercise Science major prepares students for careers in fitness, exercise science, sport performance, wellness and allied health. Students can continue their education by pursuing graduate studies in exercise physiology, cardiac rehabilitation and rehabilitative science. Students learn to administer health appraisals and fitness assessments; understand exercise techniques; and design exercise programs for healthy adults, athletes and special populations. The exercise science program provides students with the educational experience to develop aerobic, anaerobic and resistance training programs to enhance cardio respiratory endurance, body composition, strength, power, balance, speed, agility and flexibility. One of the goals of the Exercise Science program is to prepare students for certification exams by nationally recognized health, fitness, sports performance and sports medicine organizations such as the National Academy of Sports Medicine, National Strength and Conditioning Association, American College of Sports Medicine and American Council on Exercise. To receive the B.S. Degree in Exercise Science, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Student will apply knowledge of anatomy, biomechanics, exercise physiology, risk factors, health appraisal, nutrition, weight management, exercise programming, and metabolic calculations.
- Students will learn to implement the optimum performance training model to design exercise programs that are safe, effective, maximize performance and optimize health.
- Students will apply basic competencies required of a fitness professional in a sports medicine, cardiac rehabilitation, fitness center or sports training facility.

### **Core Requirements (38 credits)**

Students must earn at least two credits in PE 469 Internship.

AT 220 Care and Prevention of Injuries & Illnesses (3)

HLTH 110 Personal Health and Wellness (3)

HLTH 125 First Aid and CPR (2)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 330 Disease Prevention (2)  
PE 310 Sport and Play in the United States (3)  
PE 311 Motor Learning (2)  
PE 320 Anatomical Kinesiology (3)  
PE 321 Human Physiology (3)  
PE 365 Health and Fitness Instructor (3)  
PE 420 Biomechanics (3)  
PE 421 Physiology of Exercise (3)  
PE 469 Internship (2-12)  
PE 473 Exercise Testing and Interpretation (3)

**Restricted Electives (17 credits)**

Elective course selections should be made in close consultation with students advisor, depending upon the career goals of the student. 17 credits.

**Recommended for students interested in a career as a fitness professional:**

ENTR 230 Entrepreneurial Finance (3)  
ENTR 231 Entrepreneurial Leadership & Organization (3)  
ENTR 232 Entrepreneurial Marketing (3)  
PE Exercise Science Activity Courses (Maximum of 4 credits)  
PE 100 – Aerobics (1)  
PE 102 – Weight Training I (1)  
PE 136 – Pilates (1)  
PE 137 – Yoga (1)  
PE 190 – Topics (1)  
PE 193 – Elementary School Activities (1)  
PE 202 Strength and Conditioning Exercise Techniques (1)  
PE 302 Strength and Conditioning Program Design (2)  
PE 452 Adapted PE (3)  
PE 364 Group Exercise Instruction (3)  
PE 460 Principles of Coaching (3)  
PE 474 Tests and Measurements in PE (3)

**Recommended for students applying to a graduate program (exercise physiology, cardiac rehab, rehabilitative science):**

AT 210 Medical Terminology (1)  
BIOL 111/BIOL 111L Cell Biology and lab (4)  
BIOL 115/BIOL 115L Organismal Biology and lab (4)  
BIOL 323/BIOL 323L Human Anatomy and lab (4)  
BIOL 349/BIOL 349L Human Physiology and lab (4)  
CHEM 150/CHEM 150L General Chemistry I and lab (4)  
CHEM 210/CHEM 210L General Chemistry II and lab (4)  
MATH 234 Intro to Probability and Statistics (3)  
PE 321 Human Physiology (3)  
PHYS 160 College Physics I and lab (4)  
PHYS 161 College Physics II and lab (4)

PSY 202 Developmental Psychology (3)

PSY 463 Abnormal Psychology (3)

**Recommended for students interested in health and wellness:**

HLTH 190 Topics

HLTH 327 Safety Education and Consumer Protection (3)

HLTH 412 Education for Sexuality and HIV/AIDS (3)

**Recommended to improve communication and computer skills:**

CSIS 103 Computer Concepts and Applications (3)

ENGL 286 Writing for the Workplace (3)

ENGL 387 Technical Report Writing (3)

COMM 100 Speech Communication (3)

**B.S. Degree in Health Education**

To receive the B.S. Degree in Health Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or higher is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

**Student Learning Outcomes**

- Health education teachers will assess individual and community needs for health education.
- Health education teachers plan effective health education programs.
- Health education teachers implement health education programs.
- Health education teachers evaluate the effectiveness of coordinated school health programs.
- Health education teachers coordinate provision of health education programs and services.
- Health education teachers act as a resource person in health education.
- Health education teachers communicate health and health education needs, concerns, and resources.

In addition to the health courses listed below, students must fulfill 36 credits of teacher licensure requirements. SARTE admittance is required to take some of the 300/400 level ED and HLTH courses.

**Core Requirements (60 credits)**

HLTH 110 Personal Health and Wellness (3)

HLTH 125 First Aid and CPR (2)

HLTH 305 Introduction to Nutrition (3)

HLTH 327 Safety Education and Consumer Protection (3)

HLTH 330 Disease Prevention (2)

HLTH 335 Health Education and the Middle Level Adolescent (3)

HLTH 340 Health Methods and Materials (3)

HLTH 412 Education for Sexuality and HIV/AIDS (3)

HLTH 465 Coordinated School Health Programs (2)

**Total: 24 credits**

**Secondary Education Licensure Requirements**

AMCS 233 Education and Multicultural America (3)

COMM 100 Speech Communication (3)

ED 205 Introduction to Education (3)  
 ED 294 Educational Psychology (3)  
 ED 310 Social Foundations of Education (3)  
 ED 498 The Professional Teacher in the Classroom (3)  
 ED 448 Reading Study Skills in the Content Areas (3)  
 ED 461S Student Teaching: Secondary (12) **or**  
 ED 460S Student Teaching: Secondary (6) **and**  
 EECE 480E Student Teaching: Elementary (6) **or**  
 ED 461V Student Teaching: Secondary/K-12 (12)  
 SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

#### Related Requirements (18 credits)

Courses in the following areas: Athletic Training, Biology, Community Health, Health Service Administration, Physical Education, Psychology, Philosophy and Sociology (Suggested courses are listed).

AT 220 Care and Prevention of Injuries & Illnesses (3)  
 BIOL 100 Issues in Human Biology (3)  
 BIOL 104 Human Biology (3)  
 BIOL 109 Biology Today (3)  
 COMH 315 Health Agencies and Services (3)  
 COMH 418 Global Health Issues (3)  
 HSAD 326 Epidemiology (3)  
 PE 321 Human Physiology (3)  
 PHIL 311 Morals and Medicine (3)  
 PSY 113 General Psychology (3)  
 SOC 110 Introduction to Sociology (3)  
 SOC 120 Social Psychology (3)  
 SOC 320 Sociology of the Family (3)

### **B.S. Degree in Physical Education-Teaching**

To receive the B.S. Degree in Physical Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits and a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

#### Student Learning Outcomes

- **Content Knowledge:** Physical education teachers understand physical education content and disciplinary concepts related to the development of a physically educated person.
- **Growth and Development:** Physical education teachers understand how individuals learn and develop and can provide opportunities that support their physical, cognitive, social, and emotional development.
- **Diverse Students:** Physical education teachers understand how individuals differ in their approaches to learning and create appropriate instruction adapted to these differences.
- **Management and Motivation:** Physical education teachers use an understanding of individual and group motivation and behavior to create a safe learning environment that encourages positive social interaction, active engagement in learning and self-motivation.

- Communication: Physical education teachers use knowledge of effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity settings.
- Planning and Instruction: Physical education teachers plan and implement a variety of developmentally appropriate instructional strategies to develop physically educated individuals, based on state and national (NASPE K-12) standards.
- Student Assessment: Physical education teachers understand and use assessment to foster physical, cognitive, social, and emotional development of students in physical activity.
- Reflection: Physical education teachers are reflective practitioners who evaluate the effects of their actions on others and seek opportunities to grow professionally.
- Technology: Physical education teachers use information technology to enhance learning and to enhance personal and professional productivity.
- Collaboration: Physical education teachers foster relationships with colleagues, parents/guardians, and community agencies to support students' growth and well-being.

### Core Requirements (81 credits)

In addition to the health and physical education courses listed below, students must fulfill 36 credits of teacher licensure requirements. SARTE admittance is required to take some of the 300/400 level PE courses.

HLTH 110 Personal Health and Wellness (3)  
 HLTH 125 First Aid and CPR (2)  
 PE 191 Activities Course: Dance (2)  
 PE 192 Activities Course: Gymnastics (1)  
 PE 193 Activities Course: Elementary School (2)  
 PE 194 Activities Course: Non-Traditional (1)  
 PE 200 Foundations of Physical Education (3)  
 PE 310 Sport and Play in the United States (3)  
 PE 311 Motor Learning (2)  
 PE 320 Anatomical Kinesiology (3)  
 PE 321 Human Physiology (3)  
 PE 360 Elementary Methods in Physical Education (3)  
 PE 361 Secondary Methods in Physical Education (3)  
 PE 362 Middle School Methods in Physical Education (2)  
 PE 420 Biomechanics (3)  
 PE 421 Physiology of Exercise (3)  
 PE 452 Adaptive Physical Education (3)  
 PE 474 Tests and Measurements in Physical Education (3)

**Total: 45 credits**

### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
 COMM 100 Speech Communication (3)  
 ED 205 Introduction to Education (3)  
 ED 294 Educational Psychology (3)  
 ED 310 Social Foundations of Education (3)  
 ED 498 The Professional Teacher in the Classroom (3)  
 ED 448 Reading Study Skills in the Content Areas (3)  
 ED 461S Student Teaching: Secondary (12) **or**  
 ED 460S Student Teaching: Secondary (6) **and**



EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)  
**Total: 36 credits**

#### Restricted Electives (3 credits)

Students must earn one credit in courses that focus on physical fitness, one credit in courses that focus on team sports, and one credit in courses that focus on individual sports. Consult your academic advisor when making your selections from the listed courses.

PE 100 Aerobic Dance (1)  
PE 102 Weight Training I (1)  
PE 112 Bowling (1)  
PE 114 Golf (1)  
PE 116 Tennis I (1)  
PE 124 Badminton (1)  
PE 130 Volleyball I (1)  
PE 132 Basketball (1)  
PE 134 Soccer (1)  
PE 136 Pilates (1)  
PE 137 Yoga I (1)  
PE 160 Swimming I (1)  
PE 190 Topics in Fundamental Activities (1-4)

### **B.A. Degree in Physical Education**

To receive the B.A. Degree in Physical Education (non-teaching), the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- **Content Knowledge:** Physical education teachers understand physical education content and disciplinary concepts related to the development of a physically educated person.
- **Growth and Development:** Physical education teachers understand how individuals learn and develop and can provide opportunities that support their physical, cognitive, social, and emotional development.
- **Diverse Students:** Physical education teachers understand how individuals differ in their approaches to learning and create appropriate instruction adapted to these differences.
- **Management and Motivation:** Physical education teachers use an understanding of individual and group motivation and behavior to create a safe learning environment that encourages positive social interaction, active engagement in learning and self-motivation.
- **Communication:** Physical education teachers use knowledge of effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity settings.
- **Planning and Instruction:** Physical education teachers plan and implement a variety of developmentally appropriate instructional strategies to develop physically educated individuals, based on state and national standards.
- **Student Assessment:** Physical education teachers understand and use assessment to foster physical, cognitive, social, and emotional development of students in physical activity.

- Reflection: Physical education teachers are reflective practitioners who evaluate the effects of their actions on others and seek opportunities to grow professionally.
- Technology: Physical education teachers use information technology to enhance learning and to enhance personal and professional productivity.
- Collaboration: Physical education teachers foster relationships with colleagues, parents/guardians, and community agencies to support students' growth and well-being.

### Core Requirements (45 credits)

This major is for students who DO NOT plan to complete licensure in teaching.

HLTH 110 Personal Health and Wellness (3)  
 HLTH 125 First Aid and CPR (2)  
 PE 191 Activities Course: Dance (2)  
 PE 192 Activities Course: Gymnastics (1)  
 PE 193 Activities Course: Elementary School (2)  
 PE 194 Activities Course: Non-Traditional (1)  
 PE 200 Foundations of Physical Education (3)  
 PE 310 Sport and Play in the United States (3)  
 PE 311 Motor Learning (2)  
 PE 320 Anatomical Kinesiology (3)  
 PE 321 Human Physiology (3)  
 PE 360 Elementary Methods in Physical Education (3)  
 PE 361 Secondary Methods in Physical Education (3)  
 PE 362 Middle School Methods in Physical Education (2)  
 PE 420 Biomechanics (3)  
 PE 421 Physiology of Exercise (3)  
 PE 452 Adaptive Physical Education (3)  
 PE 474 Tests and Measurements in Physical Education (3)

### Restricted Electives (3 credits)

Students must earn one credit in courses that focus on physical fitness, one credit in courses that focus on team sports, and one credit in courses that focus on individual sports. Consult your academic advisor when making your selections from the listed courses.

PE 100 Aerobic Dance (1)  
 PE 102 Weight Training I (1)  
 PE 112 Bowling (1)  
 PE 114 Golf (1)  
 PE 116 Tennis I (1)  
 PE 124 Badminton (1)  
 PE 130 Volleyball I (1)  
 PE 132 Basketball (1)  
 PE 134 Soccer (1)  
 PE 136 Pilates (1)  
 PE 137 Yoga (1)  
 PE 160 Swimming (1)  
 PE 190 Topics in Fundamental Activities (1-4)

### **Minor in Coaching – 21 credits**

AT 220 Care and Prevention of Injuries & Illnesses (3)  
HLTH 125 First Aid and CPR (2)  
PE 420 Biomechanics (3)  
PE 421 Physiology of Exercise (3)  
PE 460 Principles of Coaching (3)  
PE 461 Coaching Practicum (1)

Minor must include two 3 credit coaching courses:

PE 367 Coaching Soccer (3)  
PE 371 Coaching Football (3)  
PE 372 Coaching Basketball (3)  
PE 373 Coaching Baseball and Softball (3)  
PE 374 Coaching Track and Field (3)  
PE 375 Coaching Wrestling (3)  
PE 376 Coaching Golf and Tennis (3)  
PE 378 Coaching Swimming and Diving (3)  
PE 379 Coaching Volleyball (3)

### **Minor in Health Education – 27 credits**

Students who select this minor must also earn a teaching major in another discipline. Students should be advised the state of Minnesota does not recognize minors in health education for teacher licensure. Students who desire licensure in states other than Minnesota should check with teacher licensure authorities to determine licensure requirements.

HLTH 110 Personal Health and Wellness (3)  
HLTH 125 First Aid and CPR (2)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 327 Safety Education and Consumer Protection (3)  
HLTH 330 Disease Prevention (2)  
HLTH 335 Health Education and the Middle Level Adolescent (3)  
HLTH 340 Health Methods and Materials (3)  
HLTH 412 Education for Sexuality and HIV/AIDS (3)  
HLTH 465 Coordinated School Health Programs (2)  
PE 321 Human Physiology (3)

### **Minor in Physical Education-Teaching – 28 credits**

Students who select this minor must also earn a teaching major in another discipline. Students should be advised that the State of Minnesota does not recognize minors in Physical Education for teacher licensure. Students who desire licensure in states other than Minnesota should check with teacher licensure authorities to determine licensure requirements. In addition to the courses listed below, students are required to earn one additional elective in an activity course.

HLTH 125 First Aid and CPR (2)  
PE 191 Activities Course: Dance (2)  
PE 192 Activities Course: Gymnastics (1)  
PE 193 Activities Course: Elementary School (2)

PE 200 Foundations of Physical Education (3)  
PE 320 Anatomical Kinesiology (3)  
PE 321 Human Physiology (3)  
PE 360 Elementary Methods in Physical Education (3)  
PE 361 Secondary Methods in Physical Education (3)  
PE 362 Middle School Methods in Physical Education (2)  
PE 452 Adaptive Physical Education (3)

### **Minor in Strength and Conditioning - 21 credits**

The strength and conditioning minor prepares students to design strength and conditioning programs that are safe, effective and enhance athletic performance.

HLTH 125 First Aid and CPR (2)  
HLTH 305 Introduction to Nutrition (3)  
PE 202 Strength and Conditioning Exercise Techniques (1)  
PE 302 Strength and Conditioning Program Design (2)  
PE 320 Anatomical Kinesiology (3)  
PE 365 Health and Fitness Instructor (3)  
PE 402 Strength and Conditioning Practicum (1)  
PE 420 Biomechanics (3)  
PE 421 Physiology of Exercise (3)

### **Minor in Wellness – 21 credits**

The Wellness Minor is designed to introduce students to wellness concepts and develop the strategies to achieve optimal health.

HLTH 110 Personal Health & Wellness (3)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 327 Safety Education and Consumer Protection (3)  
HLTH 330 Disease Prevention (2)  
HLTH 412 Education for Sexuality and HIV/AIDS (3)

Seven credits total. Maximum of two credits in Wellness Activity courses (PE).

PE 100 Aerobic Dance (1)  
PE 104 Exercise and Body Development (1)  
PE 136 Pilates (1)  
PE 137 Yoga I (1)  
PE 190 Topics (1)

AT 210 Medical Terminology (1)  
BIOL 300 Biology of Women (3)  
HLTH 125 First Aid and CPR (2)  
HLTH 190 Topics (1)  
HSAD 326 Applied Epidemiology (3)  
PSY 220 Social Behavior (3)  
PSY 265 Health Psychology (3)  
PSY 403 Adulthood and Aging (3)  
PSY 317 Alcoholism and Drug Abuse (3)

## **Certificate in DAPE**

The Developmental and Adapted Physical Education Certificate provides specialized training to teach physical education to school students with a wide range of developmental and physical disabilities. The MSUM DAPE Certificate covers the content areas required to earn licensure in the State of Minnesota. Minnesota Education requirements list the DAPE Licensure as an add-on license to a Physical Education K-12 degree. Program requirements include an extensive 200 hours of field placement for this DAPE Certificate; 40 hours can be completed under an approved DAPE certified program and 160 hours must be completed under an approved DAPE certified MN licensed DAPE teacher. The DAPE license is a MN PK- 21 teaching license; and has been identified as a MN teacher shortage area. The DAPE Certificate is an excellent complement to the Physical Education major; by MN law, only a MN licensed physical education teacher can obtain a MN DAPE teaching license.

Teachers of Special Education: DAPE

Subp.3. Subject matter standard. A candidate for licensure as a teacher of special education: developmental adapted physical education must complete a preparation program under subpart 2, item D, that must include the candidate's demonstration of the knowledge and skills in items A to E.

A. Foundational knowledge. A teacher of special education: developmental adapted physical education understands the foundations of special education services for students with disabilities relating to physical and motor fitness on which to base practice.

B. Referral, evaluation, planning, and programming. A teacher of special education: developmental adapted physical education understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with disabilities relating to physical and motor fitness

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: developmental adapted physical education understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with disabilities relating to physical and motor fitness.

D. Collaboration and communication. A teacher of special education: developmental adapted physical education cultivates and maintains positive, collaborative relationships with children and youth, families, educators, other professionals, and the community to support development and educational progress.

E. Clinical experiences. A teacher of special education: developmental adapted physical education applies the standards of effective practice in teaching students who have needs in the area of physical fitness and gross motor skills in prekindergarten and primary (preK and K-grade 4), middle level (grades 5-8), and secondary (grades 9-12, including transition programs) settings across a range of service delivery models.

Students will take four credits of internship.

ED 448 Reading Skills in Content Areas (3)

SPED 225 Individuals with Exceptionalities (3)

SPED 471 Behavior and Environment Management (3)

PE 452 Adapted Physical Education (3)

PE 453 Assessment and Programming in DAPE (3)

PE 454 Curriculum in DAPE (3)

PE 456L Lab Curriculum & Assessment for Severely Handicapped (1)

PE 469 Internship in DAPE (4)

## History, Languages, Critical Race and Women's Studies

*The Department of History, Languages, Critical Race and Women's Studies offers majors in East Asian Studies, History, Social Studies, Spanish, Spanish Education, Teaching English as a Second/Foreign Language and Women's and Gender Studies. Minors are offered in African American Studies, American Indian Studies, American Multicultural Studies, Asian American Studies, East Asian Studies, History, Spanish, Spanish Education, Teaching English as a Second Language, Women's Health and Women's and Gender Studies. A Certificate in Women and Science is also offered.*

### History and Social Studies

**MacLean Hall 374, (218) 477-2812**

**Chair:** Annette K. Morrow

**Faculty:** Yolanda Arauza, Nathan Clarke, Paul Harris, Steve Hoffbeck, Sean Taylor

**Social Studies Program Coordinator:** Steven Hoffbeck

### History

The History Department offers courses in U.S., European, South American, African, Asian, and World History to meet the varied needs and interests of our students. History courses can be found that fulfill requirements in several areas of the Liberal Arts and Sciences Curriculum. Upper-division courses in History also prepare students for careers as teachers or in such diverse areas as law, government, libraries, museums, and business. The study of history at MSUM involves much more than the memorization of names and dates. Our students learn to think analytically and critically about the past and to understand history as the experiences of real human beings.

### Social Studies

Successful completion of the Social Studies major leads to certification from the State of Minnesota to teach in grades five through twelve.

The major has four components:

- **Core requirements, also known as distribution requirements.** These courses expose majors to the various disciplines that comprise Social Studies. All students must complete the 27-29 credit requirement listed below.
- **Emphasis.** Majors must choose one discipline as their emphasis. Requirements for each discipline are listed below.
- **Secondary emphasis.** Majors must choose one discipline as their secondary emphasis. Requirements for each discipline are listed below.
- **Teacher licensure requirements.** These requirements are common to all secondary education majors and are listed under Secondary Education. Students should carefully study and understand all of these components and choose their course of study in consultation with their advisor. In selecting primary and secondary emphases, students should consider their own interest and aptitudes and the needs of the job market in secondary schools. While History is the foundation of Social Studies in the schools and is the most frequently taught subject in Social Studies, other areas are also taught at the secondary level, often depending on the size of the school. In Minnesota, high schools must commonly offer courses in Geography, Political Science, and Economics.

It is also worth noting that students can enhance their appeal as teacher candidates by qualifying themselves to coach a sport. Consult with the Health and Physical Education Department to learn more.

---

### **Languages and Cultures**

**MacLean Hall 279, (218) 477-2812**

**Chair:** Annette Morrow

**Faculty:** Nathan Clarke, John Hall, Linda Houts-Smith, Takanori Mita, Katia Sherman

### **East Asian Studies**

The department offers a B.A. major and minor in East Asian Studies. Students who major in East Asian Studies may select one of three areas of emphasis: business, humanities, or language and culture. The core requirements for this program consist of:

- Four semesters of Chinese or Japanese;
- Chinese 132 (Chinese Culture) and Japanese 142 (Japanese Culture);
- Two East Asian history courses.

For detailed requirements, see *B.A. Degree in East Asian Studies*. Three year courses of study are offered in Japanese and two years in Chinese.

### **Spanish**

The department offers B.A. and B.S. majors and minors in Spanish. In our Spanish program, students first focus on becoming proficient in their use and understanding of the language then they begin to take courses in culture and civilization, literature, linguistics, and translation.

The Department of History, Languages, Critical Race and Women's Studies is affiliated with Sigma Delta Pi, the National Collegiate Hispanic Honor Society. Our chapter of the Society, Upsilon Sigma, has been nationally recognized for Honor and Merit.

Proposed course of study for B.A. Spanish majors:

#### **1st year**

Fall semester SPAN 201 and SPAN 211

Spring semester SPAN 202 and SPAN 212

#### **2nd year**

Fall semester SPAN 301 and SPAN 311

Spring semester SPAN 302, SPAN 321 (odd years) or SPAN 322 (even years)

#### **3rd year**

Fall semester SPAN 340 and SPAN 401

Spring semester SPAN 341 (even years) or SPAN 342 (odd years), SPAN 351

#### **4th year**

Fall semester any 3rd or 4th year elective

Spring semester any 3rd or 4th year elective

Students who are seeking a B.S. degree in Spanish Education will need to work closely with their advisor in order to make the proper adjustments to the program outlined above. Students who begin their Spanish

studies at a level below Spanish 201 will also need to make adjustments to the above schedule, in consultation with their faculty advisor.

**All transfer students and incoming freshmen must take a placement exam before enrolling in Spanish courses.**

### **Other Languages**

Students may obtain minors in French, German, Norwegian, and Scandinavian Studies through Tri-College coursework.

### **Study Abroad**

Students who are studying in the department are strongly encouraged to take advantage of the opportunity to study abroad. We have exchange programs and connections with other study abroad programs in Japan, Spain, and Ecuador. Students who wish to study abroad should work closely with their faculty advisor in order to plan a course of study that will apply to their major or minor coursework. For further information, contact the department. Organized trips usually take place in the spring or right after spring semester.

### **General Information**

Several departments/programs, —including Art History, Biology, Chemistry, English, History, Mass Communications, Philosophy, Political Science, Psychology, and Sociology—either require or strongly recommend that their B.A. majors study at least one foreign language, especially if they intend to pursue graduate degrees. International Business and International Studies require two years of a foreign language.

### **Teaching Foreign Languages**

Students who plan to teach foreign languages in elementary or secondary public schools should elect the B.S. major or minor.

All students, including transfer students, who apply for the B.S. degree with a language major must have completed a minimum of 14 credits of upper-level coursework in the department, including LANG 471 and LANG 472. Candidates for teaching licensure must be able to pass a number of proficiency tests that meet the standards of the State Board of Teaching before the application for teaching licensure can be approved. All students seeking a B.S. major or minor in the department should establish and maintain close contact with a departmental advisor to be certain that satisfactory progress is being made toward the degree. Consult with the department chair concerning an advisor.

### **Graduate Study in Foreign Languages**

A reading knowledge of a second foreign language is essential to graduate study in languages. A student who expects to seek a graduate degree is advised to plan an undergraduate curriculum with a minor in a second language or with a double major. It is also advisable to take more than the minimum credits required for the major.

---

### **Teaching English as a Second Language or Foreign Language**

**Chair:** Annette Morrow

**Program Coordinator:** Linda Houts-Smith

### **MacLean Hall 279B, 218-477-4059**

The Bachelor of Science in Teaching ESL is a degree for individuals who wish to practice teaching ESL/EFL in a classroom setting overseas or in U.S. K-12 schools. It is specifically intended to provide individuals with the



initial preparation for a teaching certificate in Minnesota. Since licensure requirements vary from state to state and country to country, students should consult licensing boards in the locations where they wish to work to determine whether the B.S. in TESL will meet the requirements in the location of the student's choice. The Bachelor of Arts in Teaching EFL is geared towards individuals, such as international students, who wish to teach English as a foreign language in countries where English is not the dominant language. It may also lead to limited possibilities in the U.S., such as working in adult ESL programs where only a bachelor's degree is required. It can serve as a foundation for teaching ESL in community colleges and universities in the U.S., but is not enough for working at those levels. Students who wish to work at those levels should expect to continue beyond the bachelor's degree to an M.A. in TESL. This degree is inappropriate for those who hope to teach English in k-12 schools in the United States, as it will not lead to a k-12 teaching license. Students who wish to obtain that credential should enroll in the B.S. in TESL, which is approved by the Minnesota State Professional Educator Licensing and Standards Board requirements for teachers of ESL and has been accredited by the Council for the Accreditation of Educator Preparation (CAEP).

---

### **American Multicultural Studies**

**MacLean Hall 374, (218) 477-2812**

**Chair:** Annette Morrow

**Faculty:** Yolanda Arauza, Phyllis May-Machunda, Kim Park Nelson

American Multicultural Studies courses develop students' knowledge and understanding of the diverse heritage of the United States in the past and present. Grounded in the historical experiences, cultural practices, literary traditions, artistic production, intellectual contributions, political struggles, and voices of Native American Indian, African American, Chicano/Latino and Asian American peoples, American Multicultural Studies courses provide an increased level of knowledge about the multicultural foundations of the United States. By emphasizing these perspectives, we challenge misperceptions derived from the social construction of race and use interdisciplinary methods to situate these histories and viewpoints into contexts that highlight interactions with the American mainstream. As a result, students learn theoretical and applied skills central to a liberal studies education, while cultivating a greater respect for the diversity of our common humanity.

American Multicultural Studies courses are particularly appropriate for career fields where a broad and diverse knowledge of American society is desirable, such as in history, education, human and social services, public service, business, communications, sociology, health professions, women's studies, global studies, law and the arts.

---

### **Women's and Gender Studies**

**MacLean Hall, 175 (218) 477-4075**

**Chair:** Annette Morrow

**Program Director:** Kandace Creel Falcon

**Program and Affiliated Faculty:** Anna Arnar, Laurie Blunsom, Steve Bolduc, Marilea Bramer, Karen Branden, Ellen Brisch, Layna Cole, Rebecca Gardner, Brittney Goodman, Paul Harris, Geri Hendrix-Sloan, Susan Humphers-Ginther, Kyja Kristjansson-Nelson, Phyllis May-Machunda, Terry Manno, Katherine Meiners, Annette Morrow, Carol Okigbo, Raymond Rea, Larry Schwartz, Sherry Short, Chris Walla, Patricia Wisenden, Deborah White

### **Women's and Gender Studies Curriculum**

The Women's and Gender Studies program at MSUM has been ongoing since 1971. Students can earn a major or minor in Women's and Gender Studies, a minor in Women's Health, and a certificate in Women and

Science. Women's and Gender Studies uses diverse historic and contemporary sources to examine the intersections of gender with racism, classism, heterosexism and other oppressions. Courses in the program use theoretical frameworks from social science, history and humanities plus other disciplines grounded in anti-oppression and social justice work to analyze the social and political locations of diverse identities. The program combines an interdisciplinary understanding of social structures with specific analyses of women's experiences both locally and globally. Students are challenged to understand and analyze complex current and historic realities and to enact social change through activism.

For further information about the Women's and Gender Studies Program, please visit our website: [web.mnstate.edu/women/](http://web.mnstate.edu/women/).

## **B.A. Degree in East Asian Studies**

To receive the B.A. Degree in East Asian Studies, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Ability to assess their knowledge of Asian history
- Ability to demonstrate listening comprehension skills, writing skills, and reading skills in Japanese and Chinese.

### **Core Requirements (22 credits)**

This core is required of all students who major in one of the East Asian Studies emphases: Language and Culture, Humanities, and Business. All students must complete Chinese 132 and Japanese 142. Additionally, students must complete the Chinese 101, 102, 201, 202 sequence or the Japanese 101, 102, 201, 202 sequence. Students may not count courses in more than one category; if a course satisfies the Core Requirements section, it may not also be used to satisfy a requirement in any of the emphases. No courses in the Core Requirements or the emphases may be taken Pass/Fail.

CHIN 132 Introduction to Chinese Culture (3)  
JAPN 142 Introduction to Japanese Culture (3)  
CHIN 101 Beginning Chinese I (4)  
CHIN 102 Beginning Chinese II (4)  
CHIN 201 Intermediate Chinese I (4)  
CHIN 202 Intermediate Chinese II (4)

### **OR**

JAPN 101 Beginning Japanese I (4)  
JAPN 102 Beginning Japanese II (4)  
JAPN 201 Intermediate Japanese I (4)  
JAPN 202 Intermediate Japanese II (4)

### **Related Requirements (6 credits)**

HUM 320 Humanities East-West required and choose one more from the list for the remaining 3 credits.

HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)

HIST 347 Modern Japan (3)  
HUM 320 Humanities East and West (3)

### **Business Emphasis**

#### **Program Requirements (12 credits)**

Students must earn twelve credits from the following list of courses. Normally, business minors or majors will not need additional prerequisites to take these courses. Non-business students should note that ACCT 231 and MATH 234 are prerequisites for FINC 340; FINC 340 is a prerequisite for FINC 445; ECON 202 is a prerequisite for MKTG 270; MKTG 270 is a prerequisite for MKTG 444; and MGMT 260 is a prerequisite for MGMT 458.

ECON 300 Global Economic Issues (3)  
FINC 340 Financial Management (3)  
FINC 445 International Financial Management (3)  
MGMT 260 Principles of Management (3)  
MGMT 458 International Management (3)  
MKTG 270 Principles of Marketing (3)  
MKTG 444 International Marketing (3)

#### **Related Requirements (6 credits)**

Students must take HUM 320 and must also select one additional course from the following list.

HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)  
HIST 347 Modern Japan (3)  
HUM 320 Humanities East and West (3)

### **Humanities Emphasis**

#### **Program Requirements (4 credits)**

ART 338 Non-Western Art (4)

#### **Related Requirements (6 credits)**

Students must take HUM 320 and must also select one additional course from the following list.

HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)  
HIST 347 Modern Japan (3)  
HUM 320 Humanities East and West (3)

#### **Restricted Electives (9 credits)**

Students must earn four credits from the listed history courses (students may not use courses taken previously to satisfy the Related Requirements section). Students must also earn five credits in advanced language/culture study in the listed Chinese, History, Humanities, Japanese, or Speech courses (students may satisfy part or all of the language/culture requirement via approved study abroad programs).

CHIN 390 Topics in Chinese Language, Literature and Culture (1-4)  
CHIN 397 Independent Study in Chinese - Advanced Level (1-3)

COMM 285 Intercultural Communication (3) *\*was COMM 300*  
HIST 220 Asian-American Experience (3)  
HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)  
HIST 347 Modern Japan (3)  
HIST 492 Senior Seminar (3-4) *\*was HIST 401*  
HIST 497 Independent Study (1-3)  
HUM 320 Humanities East and West (3)  
JAPN 390 Topics in Japanese Language, Literature and Culture (1-4)  
JAPN 397 Independent Study in Japanese: Advanced Level I (1-3)

### **Language and Culture Emphasis**

#### **Related Requirements (6 credits)**

Students must take HUM 320 and must also select one additional course from the list.

HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)  
HIST 347 Modern Japan (3)  
HUM 320 Humanities East and West (3)

#### **Restricted Electives (12 credits)**

Students must complete four credits from the listed history courses (students may not use courses taken previously to satisfy the Related Requirements section). Students must also complete eight credits in advanced language/culture study in the listed Japanese or Chinese courses (students may satisfy part or all of the language/culture requirement via approved study abroad programs).

CHIN 390 Topics in Chinese Language, Literature and Culture (1-4)  
CHIN 397 Independent Study in Chinese - Advanced Level (1-3)  
HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 346 Modern China (3)  
HIST 347 Modern Japan (3)  
HIST 492 Senior Seminar (3-4) *\*was HIST 401*  
HIST 497 Independent Study (1-3)  
JAPN 390 Topics in Japanese Language, Literature and Culture (1-4)  
JAPN 397 Independent Study in Japanese: Advanced Level I (1-3)

### **B.A. Degree in History**

To receive the B.A. Degree in History, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits). A grade of C or higher is required in all coursework for this program.

## Student Learning Outcomes

- Reading Comprehension and Cognitive Skills: Students should be able to identify the main point or thesis in a piece of historical writing; analyze how authors develop their theses and support them with evidence; and recognize and evaluate the differences in historical interpretation among different authors.
- Historical Thinking Skills: Students should be able to recognize potential sources of bias in historical writings; understand and interpret events in their appropriate historic context; understand and interpret relations of cause and effect and other sequential relations; understand the complexity of human motivations, and appreciate cultural differences in patterns of behavior and ideation; and synthesize a variety of evidence into a coherent and plausible account of events.
- Research Skills: Students should be able to recognize the difference between primary and secondary sources, and understand the uses and importance of each type; select and refine an appropriate topic for a given assignment; identify a variety of different kinds of source materials that could shed light on a particular topic; use the library and various bibliographic aids to identify and locate different sources relevant to a particular topic; evaluate which of their sources are the most authoritative; compile and annotate a bibliography and present in proper format; and conduct an oral history interview.
- Written Communication Skills: Students should be able to formulate a thesis on the basis of insights gained from research; develop their thesis in an organized logical progression; use appropriate evidence to support points; cite their sources properly; summarize points made in source materials and make the connections between different points of view and their own; recognize the shortcomings of their evidence and anticipate possible objections; respond constructively to criticism and make appropriate revisions; write clear and grammatical prose; and critically evaluate the work of other students.
- Oral Communication Skills: Students should be able to respond clearly and thoughtfully to questions and comments in class discussion; draw upon and summarize reading materials in ways that address larger themes and issues; deliver an effective oral presentation; and critically evaluate the work of other students.
- Computer Literacy: Students should be able to produce a paper using word processing software; use email; and conduct research using the world wide web in addition to traditional sources.

## Core Requirements (19 credits)

HIST 104 World History I (3)

HIST 105 World History II (3)

HIST 121 US History I (3)

HIST 122 US History II (3)

HIST 205 Introduction to Historical Methods (3)

HIST 492 Senior Seminar (4)

## Related Requirements

Students must earn at least a C in each history class.

Students are responsible for keeping an archive of their academic work on e-folio.

## Restricted Electives (18 credits)

Students must complete:

- Between 6 and 12 credits at the 300 level or above in the European history.
- Between 6 and 12 credits at the 300 level or above in the United States or Canadian history.

- Between 6 and 12 credits at the 300 level or above in the African, Asian, Latin American, or Middle Eastern history.

At least two (2) or more of the following geographical areas must be represented: Africa, Asia, Latin America, or the Middle East.

### Electives (46 credits)

Students must earn at least 46 credits in courses with the History rubric. The elective total credits in History may vary, depending on the credit value of the History courses which students present for graduation.

## **B.S. Degree in Social Studies**

To receive the B.S. Degree in Social Studies, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits). Students must complete a primary and a secondary emphasis.

### Student Learning Outcomes

- **Reading Comprehension and Cognitive Skills:** Students should be able to identify the main point or thesis in a piece of historical writing; analyze how authors develop their theses and support them with evidence; and recognize and evaluate the differences in historical interpretation among different authors.
- **Historical Thinking Skills:** Students should be able to recognize potential sources of bias in historical writings; understand and interpret events in their appropriate historic context; understand and interpret relations of cause and effect and other sequential relations; understand the complexity of human motivations, and appreciate cultural differences in patterns of behavior and ideation; and synthesize a variety of evidence into a coherent and plausible account of events.
- **Research Skills:** Students should be able to recognize the difference between primary and secondary sources, and understand the uses and importance of each type; select and refine an appropriate topic for a given assignment; identify a variety of different kinds of source materials that could shed light on a particular topic; use the library and various bibliographic aids to identify and locate different sources relevant to a particular topic; evaluate which of their sources are the most authoritative; compile and annotate a bibliography and present in proper format; and conduct an oral history interview.
- **Written Communication Skills:** Students should be able to formulate a thesis on the basis of insights gained from research; develop their thesis in an organized logical progression; use appropriate evidence to support points; cite their sources properly; summarize points made in source materials and make the connections between different points of view and their own; recognize the shortcomings of their evidence and anticipate possible objections; respond constructively to criticism and make appropriate revisions; write clear and grammatical prose; and critically evaluate the work of other students.
- **Oral Communication Skills:** Students should be able to respond clearly and thoughtfully to questions and comments in class discussion; draw upon and summarize reading materials in ways that address larger themes and issues; deliver an effective oral presentation; and critically evaluate the work of other students.
- **Computer Literacy:** Students should be able to produce a paper using word processing software; use email; and conduct research using the internet in addition to traditional sources.

### Core Requirements (63 credits)

ANTH 110 Introduction to Cultural Anthropology (3)

ECON 100 The American Economy (3)  
GEOS 111 Cultures and Regions (3)  
HIST 121 History of the United States to 1877 (3)  
HIST 122 History of the United States Since 1877 (3)  
HIST 440 Secondary Social Studies Instruction (3)  
POL 105 Making Sense of Politics (3)  
PSY 113 General Psychology (3)  
SOC 110 Introduction to Sociology (3) **or**  
SOC 210 Social Problems (3)  
**Total: 27 credits**

**Secondary Education Licensure Requirements**

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)  
**Total: 36 credits**

**Anthropology Primary Emphasis** (24 credits)

In addition to the courses listed below, students must take 12 elective credits in Anthropology and at least one of the courses must be a cultural anthropology course. Students must also choose a secondary emphasis in Economics, Geography, History, Political Science, Psychology, or Sociology.

ANTH 115 Introduction to Archaeology (3)  
ANTH 120 Introduction to Physical Anthropology (3)  
ANTH 265 Language and Culture (3)  
ANTH 300 Archaeology (3)

**Anthropology Secondary Emphasis** (12 credits)

In addition to one of the courses listed below, students must also choose at least nine credits of Anthropology electives.

ANTH 115 Introduction to Archaeology (3) **or**  
ANTH 120 Introduction to Physical Anthropology (3)

**Economics Primary Emphasis** (24 credits)

In addition to the courses listed below, students must complete at least nine elective credits in Economics courses. Students must also choose a secondary emphasis in Anthropology, Geography, History, Political Science, Psychology, or Sociology.

ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
ECON 300 Global Economic Issues (3)  
ECON 302 Intermediate Microeconomic Theory (3)  
ECON 304 Intermediate Macroeconomic Theory (3)

**Economics Secondary Emphasis** (12 credits)

In addition to the courses listed below, students must complete three credits in economics electives at the 300 level or higher.

ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
ECON 300 Global Economic Issues (3)

**Geography Primary Emphasis** (25 credits)

All students in this emphasis must complete GEOS 110 Introductory Physical Geography (3) and GEOS 492 Senior Seminar (1). Additionally, students must complete six credits from the following courses. Students must also choose a secondary emphasis in Anthropology, Economics, History, Political Science, Psychology, or Sociology.

GEOS 235 Geography of Minnesota and North Dakota (3)  
GEOS 310 United States and Canada (3)  
GEOS 410 Eastern Europe and Russia (3)

Students must complete fifteen credits from the following courses. Students may not fulfill the "Restricted Electives" section with any of the courses applied toward the "Requirements" section of this emphasis.

ANTH 307 Ecological Anthropology (3)  
GEOS 235 Geography of Minnesota and North Dakota (3)  
GEOS 305 Oceanography (3)  
GEOS 307 Introduction to Geographic Information Systems (GIS) (3)  
GEOS 310 United States and Canada (3)  
GEOS 320 Economic Geography (3)  
GEOS 325 Reading Landscape: Ways of Seeing (3)  
GEOS 330 Elementary Meteorology (3)  
GEOS 335 Environmental Geography and Conservation (3)  
GEOS 410 Eastern Europe and Russia (3)

**Geography Secondary Emphasis** (12 credits)

Students must take GEOS 110 Introductory Physical Geography (3) and must also take one of the following courses:

GEOS 235 Geography of Minnesota and North Dakota (3)  
GEOS 310 United States and Canada (3)  
GEOS 410 Eastern Europe and Russia (3)

Students will complete six credits from the listed courses. Students may not fulfill the "Restricted Electives" section with any of the courses applied toward the "Requirements" section of this emphasis.



ANTH 307 Ecological Anthropology (3)  
GEOS 235 Geography of Minnesota and North Dakota (3)  
GEOS 305 Oceanography (3)  
GEOS 307 Introduction to Geographic Information Systems (GIS) (3)  
GEOS 310 United States and Canada (3)  
GEOS 320 Economic Geography (3)  
GEOS 325 Reading Landscape: Ways of Seeing (3)  
GEOS 330 Elementary Meteorology (3)  
GEOS 335 Environmental Geography and Conservation (3)  
GEOS 410 Eastern Europe and Russia (3)

**History Primary Emphasis** (21 credits)

Students must take the following. Students must also choose a secondary emphasis in Anthropology, Economics, Geography, Political Science, Psychology, or Sociology.

HIST 104 World History I (3)  
HIST 105 World History II (3)  
HIST 205 Introduction to Historical Methods (3)

Additionally, students must take 12 credits of electives at the 300 level or above distributed in the following areas: at least three credits in European History, at least three credits in U.S. or Canadian History, and at least three credits in African, Asian, Latin American, or modern Middle Eastern History. In addition, students must take a 3 credit elective which can be in any area of history.

**History Secondary Emphasis** (12 credits)

Students must take HIST 105 World History II (3)

Students must also take 9 credits of courses at the 300 level or above distributed as follows: one course in European History; one course in the history of either Africa, Asia, Latin America, or the modern Middle East; and one course in the history of the United States or Canada.

**Political Science Primary Emphasis** (24 credits)

Students must also choose a secondary emphasis in Anthropology, Economics, Geography, History, Psychology, or Sociology.

POL 120 American National Government and Politics (3)  
POL 160 International Relations (3)  
POL 221 Minnesota State and Local Government (3)  
POL 310 Political Science Research Methods (3)  
POL 315 Political Thought (3)  
POL 350 Comparative Governments of Western Europe (3)  
Students must also choose six credits in Political Science electives.

**Political Science Secondary Emphasis** (12 credits)

POL 120 American National Government and Politics (3)  
POL 160 International Relations (3)  
Students must also choose six credits in Political Science electives.

**Psychology Primary Emphasis** (24 credits)

Students must also choose a secondary emphasis in Anthropology, Economics, Geography, History, Political Science, or Sociology.

PSY 202 Developmental Psychology (3)

PSY 261 Personality (3)

In addition to the courses listed above, students must complete 15 elective credits in Psychology courses. Six of the elective credits must be at the 300 level or above.

**Psychology Secondary Emphasis** (12 credits)

PSY 202 Developmental Psychology (3) **or**

PSY 261 Personality (3)

Students must also complete 9 elective credits in Psychology courses. Six of the elective credits must be at the 300 level or above.

**Sociology Primary Emphasis** (26 credits)

Students who choose Sociology as their primary emphasis must take SOC 110 as part of the Core requirements. In addition to the courses listed below, students must take 11 credits in Sociology electives at the 300 level or above. Students must also choose a secondary emphasis in Anthropology, Economics, Geography, History, Political Science, or Psychology.

SOC 120 Social Psychology (3)

SOC 210 Social Problems (3)

SOC 302 Social Theory (3)

SOC 310 Dominant-Subordinate Group Relations (3)

SOC 412 Sociology of Complex Organizations (3)

**Sociology Secondary Emphasis** (12 credits)

Students who choose Sociology as their secondary emphasis must take SOC 110 as part of the Core requirements. In addition to the courses listed below, students must take three credits at the 300 level or above in Sociology courses.

SOC 210 Social Problems (3)

SOC 302 Social Theory (3)

SOC 310 Dominant-Subordinate Group Relations (3)

American Multicultural Studies-Secondary Emphasis Only

AMCS 300 Theories and Methods in American Multicultural Studies (3) **OR**

AMCS 372 Dynamics of Prejudice and Oppression (3)

Select one course from each of the 3 cultural emphases:

African American, American Indian and Chicano/Latino

**African American**

AMCS 209 African American Humanities I: Roots (3)

AMCS 210 African American Humanities II: 1865-Present (3)

AMCS 211 Contemporary African Americans (3)

## **American Indian**

AMCS 102 Contemporary American Indians (3)

## **Chicano/Latino**

AMCS 103 Contemporary Chicanos (3)

AMCS 203 Chicano Culture (3)

AMCS 303 Latinos in the United States (3)

## **B.A. Degree in Spanish**

To receive the B.A. Degree in Spanish, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

- Listening Proficiency: Students are able to understand main ideas and most details of connected discourse on a variety of topics in different times; demonstrate emerging awareness of culturally implied meanings.
- Reading Proficiency: Students are able to follow the main ideas or facts of written discourse.
- Writing Proficiency: Students are able to meet most practical writing needs.
- Oral Proficiency: Students can initiate and maintain communication for most uncomplicated social tasks.

### Core Requirements (36 credits)

SPAN 201 Intermediate Spanish I (4)

SPAN 202 Intermediate Spanish II (4)

SPAN 211 Intermediate Spanish Conversation I (3)

SPAN 212 Intermediate Spanish Conversation II (3)

SPAN 301 Spanish Grammar & Composition I (3)

SPAN 302 Spanish Grammar & Composition II (3)

SPAN 311 Advanced Spanish Conversation I (3)

SPAN 321 Iberian Culture and Civilization (3) **or**

SPAN 322 Latin American Culture and Civilization (3)

SPAN 340 Introduction to Spanish Literature (3)

SPAN 341 Survey of Iberian Literature (3) **or**

SPAN 342 Survey of Latin American Literature (3)

SPAN 351 Spanish Phonetics and Phonology (3)

SPAN 401 Advanced Spanish Grammar and Composition (3)

### Restricted Electives (6 credits)

Students must take six credits in Spanish electives from the following list. If a student takes SPAN 321 in partial fulfillment of the major, SPAN 322 can be taken as an elective, and vice-versa. If a student takes SPAN 341 in partial fulfillment of the major, SPAN 342 can be taken as an elective, and vice-versa.

SPAN 390 Topics in Spanish Language, Literature, and Culture (1-4)

SPAN 397 Independent Study in Spanish (1-3)

SPAN 421 Advanced Iberian Culture and Civilization (3)

SPAN 422 Advanced Latin American Culture and Civilization (3)

SPAN 443 Genres and Themes of Iberian/Latin American Literature (3)

SPAN 444 Periods and Authors of Iberian/Latin American Literature (3)

SPAN 451 Survey of Spanish Linguistics (3)  
SPAN 461 Introduction to Spanish Translation I (3)  
SPAN 490 Special Topics in Spanish Language, Literature or Culture (1-4)  
SPAN 497 Independent Study in Spanish - Advanced Level (1-3)

## **B.A. Degree in Teaching English as a Foreign Language**

The B.A. in TEFL is geared towards individuals, such as international students, who wish to teach English as a foreign language in countries where English is not the dominant language. It may also lead to limited possibilities in the U.S., such as working in adult ESL programs where only a bachelor's degree is required. It can serve as a foundation for teaching ESL in community colleges and universities in the U.S., but is not enough for working at those levels. Students who wish to work at those levels should expect to continue beyond the bachelor's degree to an M.A. in TESL. This degree is inappropriate for those who hope to teach English in k-12 schools in the United States, as it will not lead to a k-12 teaching license. Students who wish to obtain that credential should enroll in the B.S. in TESL, which is approved by the Minnesota State Professional Educator Licensing and Standards Board requirements for teachers of ESL and has been accredited by the Council for the Accreditation of Educator Preparation (CAEP).

The B.A. in TEFL program SLOs draw from the international TESOL standards for teachers of ESL. Because the program is actually intended to train teachers of EFL, however, modifications of the TESOL standards are evident.

### **Domain 1. Language**

Candidates know, understand, and use the major theories and research related to the structure and acquisition of language to help English learners' (ELs') develop language in all language domains. Candidates demonstrate understanding of language as a system, including phonology, morphology, syntax, pragmatics and semantics, and support ELs as they acquire English oral language and literacy. Candidates understand and apply theories and research in language acquisition and development to support their ELs' English language and literacy learning.

### **Domain 2. Culture**

Candidates know, understand, and use major concepts, principles, theories, and research related to the nature and role of culture and cultural groups to construct supportive learning environments for ELs. Candidates know, understand, and use major theories and research related to the nature and role of culture in their instruction. They demonstrate understanding of how cultural groups and individual cultural identities affect language learning and school achievement.

### **Domain 3. Planning, Implementing, and Managing Instruction**

Candidates know, understand, and use evidence-based practices and strategies related to planning, implementing, and managing standards-based EFL instruction. Candidates are knowledgeable about program models and skilled in teaching strategies for developing and integrating language skills. They integrate technology as well as choose and adapt classroom resources appropriate for their ELs.

Candidates know, understand, and apply concepts, research, and best practices to plan classroom instruction in a supportive learning environment for ELs. They can plan for multilevel classrooms with learners from diverse backgrounds using standards-based EFL and curriculum.

Candidates know, manage, and implement a variety of standards-based teaching strategies and techniques for developing and integrating English listening, speaking, reading, and writing.

Candidates are familiar with a wide range of standards-based materials, resources, and technologies, and choose, adapt, and use them in effective EFL teaching.

#### **Domain 4. Assessment**

Candidates demonstrate understanding of issues and concepts of assessment and use standards-based procedures with ELs.

Candidates demonstrate understanding of various assessment issues as they affect ELs, such as accountability, bias, special education testing, language proficiency, and accommodations in formal testing situations.

Candidates know and can use a variety of standards-based language proficiency instruments to show language growth and to inform their instruction. They demonstrate understanding of their uses for identification, placement, and reclassification of ELs.

Candidates know and can use a variety of performance-based assessment tools and techniques to inform instruction for in the classroom.

#### **Domain 5. Professionalism**

Candidates keep current with new instructional techniques, research results, advances in the EFL field, and education policy issues and demonstrate knowledge of the history of EFL teaching. They use such information to reflect on and improve their instruction and assessment practices. Candidates work collaboratively with school staff and the community to improve the learning environment, provide support, and advocate for students and their families.

Candidates demonstrate knowledge of history, research, educational public policy, and current practice in the field of EFL teaching and apply this knowledge to inform teaching and learning.

Candidates take advantage of professional growth opportunities and demonstrate the ability to build partnerships with colleagues and students' families and serve as community resources.

#### Core Requirements (33 credits)

ENGL 365 Language & Learning (3)

LANG 457 Second Language Acquisition & Language Teaching (3)

LANG 471 Methods & Materials in Teaching Languages I (3)

LANG 472 Methods & Materials in Teaching Languages II (3)

LANG 475 Second Language Assessment (3)

PHIL 318 Professional Ethics (3)

STL 291 Early Literacy (3)

TESL 451 English Structures (3)

TESL 454 Grammar for TESL (3)

TESL 455 Oral Discourse Structures (3)

TESL 456 Written Discourse Structures (3)

#### Related Requirements (27 credits)

1 year of college level foreign or second language study or equivalent. Language studied must be foreign or second to learner. May be met through ELP or TEFL courses. (6-8)

AMCS 233 Education and Multicultural America (3)

COMM 100 Speech Communication (3)

ED 205 Introduction to Education (3)

ED 294 Educational Psychology (3)

ENGL 101 English Composition II (3)

ENGL 201 English Composition II (3)

SPED 225 Individuals with Exceptionalities (3)

### Restricted Electives (12 credits)

12 upper division credits. LANG 469 Internship (1-12) may be used for all 12 if an appropriate placement is found. Otherwise the variable credit nature of the internship experience may allow for partial fulfillment of the total upper division elective credits.

### Electives (12 credits)

12 upper or lower division credits selected in consultation with advisor. ELP or TEFL courses numbered in the 100-200 range may count as lower division elective credits. ELP courses numbered in the 090 range may not count towards these credits.

## **B.S. Degree in Spanish Education**

To receive the B.S. Degree in Spanish Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits and a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

### **Student Learning Outcomes**

- **Listening Proficiency:** Students are able to understand main ideas and most details of connected discourse on a variety of topics in different times; demonstrate emerging awareness of culturally implied meanings.
- **Reading Proficiency:** Students are able to follow the main ideas or facts of written discourse.
- **Writing Proficiency:** Students are able to meet most practical writing needs.
- **Oral Proficiency:** Students can initiate and maintain communication for most uncomplicated social tasks.

### Core Requirements (39 credits)

The teaching major is identical to the B.A. program except that students must take LANG 471, LANG 472, and LANG 475 and fulfill all teacher licensure requirements (36 credits of education courses, including student teaching).

LANG 471 Methods and Materials in Teaching Languages I (3)  
LANG 472 Methods and Materials in Teaching Languages II (3)  
LANG 475 Second Language Assessment (3)  
SPAN 211 Intermediate Spanish Conversation I (3)  
SPAN 212 Intermediate Spanish Conversation II (3)  
SPAN 301 Spanish Grammar & Composition I (3)  
SPAN 302 Spanish Grammar & Composition II (3)  
SPAN 311 Advanced Spanish Conversation I (3)  
SPAN 321 Iberian Culture and Civilization (3) **or**  
SPAN 322 Latin American Culture and Civilization (3)  
SPAN 340 Introduction to Spanish Literature (3)  
SPAN 341 Survey of Iberian Literature (3) **or**  
SPAN 342 Survey of Latin American Literature (3)  
SPAN 351 Spanish Phonetics and Phonology (3)  
SPAN 401 Advanced Spanish Grammar and Composition (3)

**Total: 39 credits**

### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

### Restricted Electives (6 credits)

Students must take six credits from the following list. If a student takes SPAN 321 in partial fulfillment of the major, SPAN 322 can be taken as an elective, and vice-versa. If a student takes SPAN 342 in partial fulfillment of the major, SPAN 342 can be taken as an elective, and vice-versa.

SPAN 390 Topics in Spanish Language, Literature, and Culture (1-4)  
SPAN 397 Independent Study in Spanish (1-3)  
SPAN 421 Advanced Iberian Culture and Civilization (3)  
SPAN 422 Advanced Latin American Culture and Civilization (3)  
SPAN 443 Genres and Themes of Iberian/Latin American Literature (3)  
SPAN 444 Periods and Authors of Iberian/Latin American Literature (3)  
SPAN 451 Survey of Spanish Linguistics (3)  
SPAN 461 Introduction to Spanish Translation I (3)  
SPAN 490 Special Topics in Spanish Language, Literature or Culture (1-4)  
SPAN 497 Independent Study in Spanish - Advanced Level (1-3)

## **B.S. Degree in Teaching English as a Second Language**

To receive the B.S. Degree in Teaching English as a Second Language (TESL), the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

### **Program Goals**

- Graduates will meet the standards for teachers of ESL set by Minnesota State Professional Educator Licensing and Standards Board, North Dakota Educational Standards and Practices Board, TESOL, and NCATE.
- Graduates will achieve passing scores on the MTLE for ESL exam.
- Graduates will be able to teach English language learners in grades k-12 in Minnesota.
- Graduates will be able to teach English language learners in grades k-12 in North Dakota.

### **Student Learning Outcomes:**

**1. Language:** Students know, understand, and use the major theories and research related to the structure and acquisition of language to help English language learners (ELLs).

**2. Culture** Students know, understand, and use major concepts, principles, theories, and research related to the nature and role of culture and cultural groups to construct supportive learning environments for ELLs.

**3. Planning, Implementing, and Managing Instruction** Students know, understand, and use evidence-based practices and strategies related to planning, implementing, and managing standards-based ESL instruction. Candidates are knowledgeable about program models and skilled in teaching strategies for developing and integrating language skills. They integrate technology as well as choose and adapt classroom resources appropriate for their ELLs.

**4. Assessment** Students demonstrate understanding of issues and concepts of assessment and use appropriate procedures with ELLs.

**5. Professionalism** Students know how to keep current with new instructional techniques, research results, advances in the ESL field, and education policy issues. They use such information to reflect on and improve their instruction and assessment practices. They work collaboratively with school staff and the community to improve the learning environment, provide support, and advocate for ELLs and their families.

#### Core Requirements (69 credits)

ENGL 365 Language and Learning (3)

LANG 457 Second Language Acquisition & Language Teaching (3)

LANG 471 Methods and Materials in Teaching Languages I (3)

LANG 472 Methods and Materials in Teaching Languages II (3)

LANG 475 Second Language Assessment (3)

PHIL 318 Professional Ethics (3)

STL 291 Early Literacy (3)

TESL 451 English Structures (3)

TESL 454 Grammar for Teaching English as a Second Language (3)

TESL 455 Oral Discourse Structures (3)

TESL 456 Written Discourse Structures (3)

**Total: 33 credits**

#### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)

COMM 100 Speech Communication (3)

ED 205 Introduction to Education (3)

ED 294 Educational Psychology (3)

ED 310 Social Foundations of Education (3)

ED 498 The Professional Teacher in the Classroom (3)

ED 448 Reading Study Skills in the Content Areas (3)

ED 461S Student Teaching: Secondary (12) **or**

ED 460S Student Teaching: Secondary (6) **and**

EECE 480E Student Teaching: Elementary (6) **or**

ED 461V Student Teaching: Secondary/K-12 (12)

SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

#### Related Requirements

One year of second foreign language study at the college level or its equivalent (6-8 credits).

### **B.A. Degree in Women's & Gender Studies**

To receive the B.A. Degree in Women's and Gender Studies, the student must meet the minimum university



requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Describe how identities are socially constructed along intersecting axes of gender, race, class, sexuality and ability.
- Demonstrate knowledge of issues facing women and the movements that have responded to those issues both historically and globally.
- Recognize and analyze dynamics of social power, including relations of oppression and privilege between men and women as well as between women of different social groups.
- Evaluate issues utilizing the tools of multiple disciplines (multidisciplinarity) and by moving between disciplines in ways that bring those disciplines together (interdisciplinarity).
- Examine the relationship between theory and practice by applying knowledge gained in the academy to circumstances, experiences and activist work outside of the academy.

#### Core Requirements (12 credits)

WS 100 Women Today: Contemporary Women's Issues (3)

WS 247 Women's Studies: Perspectives and Intersections (3)

WS 324 Feminist Theory (3)

WS 412 Seminar in Women's Studies (3)

#### Related Requirements (6 credits)

Students must complete a minimum of six credits in the Arts and Humanities Area, six credits in Multicultural/Global Perspectives Area, and six credits in the Social and Natural Sciences Area. At least nine of these credits must be at the upper division level.

#### **Arts and Humanities Area (minimum of 6 credits):**

WS 246 - ENGL 246 Women in Literature (3)

WS 268 Global Sexualities in Pop Culture (3)

WS 312 Rhetorics of Resistance: Feminist Responses from the Humanities (3)

WS 408 - ART 408 Women and Art (4)

WS 350 - HIST 350 Women in European History (4)

HIST 375 Women in United States History (3)

WS 244 - HIST 244 Women World Religions (3)

PHIL 235 Sex and Love (3)

WS 495 - PHIL 495 Topics in Feminist Theory (3)

#### **Multicultural/Global Perspectives Area (minimum of 6 credits):**

WS 420 Feminism in Global Perspective (3) **AND** one of the following

AMCS 372 Dynamics of Prejudice and Oppression (3) **or**

WS 330 Gender, Justice and the Environment (3) **or**

WS 415 Media and Diverse Identities (3)

#### **Social and Natural Sciences Area (minimum of 6 credits):**

WS 219 - SOC 219 Sociology of Sexual Behavior (3)

WS 300 - BIOL 300 Biology of Women (3)

WS 303 - ANTH 303 Cross Cultural Gender (3)

WS 308 - SOC 308 Social Gerontology (3)

WS 333 - SOC 333 Sociology of Gender (3)  
PSY 310 Psychology of Women (3)  
WS 406 - BIOL 406 DNA as Destiny: Genetics and Society (3)  
WS 407 Inclusive Science (3)

Electives (9 credits)

Students must take nine credits and only two may be from the same disciplinary area.

COMH 301 Women's and Children's Health (3)  
AMCS 372 Dynamics of Prejudice and Oppression (3)  
HIST 375 Women in US History (3)  
PSY 310 Psychology of Women (3)  
WS 268 Global Sexualities in Pop Culture (3)  
WS 330 Gender, Justice and the Environment (3)  
WS 390 Topics in Women's Studies (1-4)  
WS 394 Research in Women's Studies (1-3) (may repeat once)  
WS 397 Independent Study (1-3) (may repeat once)  
WS 407 Inclusive Science (3)  
WS 412 Seminar in Women's Studies (3) (may repeat twice)  
WS 415 Media and Diverse Identities (3)  
WS 470 Undergraduate Teaching Assistant (1)  
PHIL 235 Sex and Love (3)  
WS 495 - PHIL 495 Topics in Feminist Theory (3)  
WS 303 - ANTH 303 Cross-Cultural Gender (3)  
WS 406 - BIOL 406 DNA as Destiny: Genetics and Society (3)  
WS 305 - ECON 305 The Economics of Poverty, Discriminations and Inequality (3)  
WS 244 - HIST 244 Women in World Religion (3)  
WS 350 - HIST 350 Women in European History (3)  
WS 219 - SOC 219 Sociology of Sexual Behavior (3)  
WS 308 - SOC 308 Social Gerontology (3)  
WS 310 - SOC 310 Dominant-Subordinate Group Relations (3)  
WS 320 - SOC 320 Sociology of the Family (3)  
WS 333 - SOC 333 Sociology of Gender (3)  
WS 312 Rhetorics of Resistance (3)  
WS 420 Feminism in Global Perspective (3) (if not taken as a core course)  
WS 408 - ART 408 Women and Art (4)  
WS 300 - BIOL 300 Biology of Women (3)  
WS 246 - ENGL 246 Women in Literature (3)

Restricted Electives

Students may use ENGL 248 only when topic relates to Women's and Gender Studies content, and CJ 400 only when the topic is "Women and Crime". (Courses listed above but not applied in a concentration area above may be used for elective credits).

CJ 400 Seminar in Criminal Justice (must be Women and Crime)  
COMH 301 Women's and Children's Health (3)  
HIST 375 Women in US History (3)  
PSY 310 Psychology of Women (3)

WS 268 Global Sexualities in Pop Culture (3)  
 WS 330 Gender, Justice and the Environment (3)  
 WS 390 Topics in Women's Studies (1-4)  
 WS 394 Research in Women's Studies (1-3) (may repeat once)  
 WS 397 Independent Study (1-3) (may repeat once)  
 WS 407 Inclusive Science (3)  
 WS 412 Seminar in Women's Studies (3) (may repeat twice)  
 WS 415 Media and Diverse Identities (3)  
 WS 470 Undergraduate Teaching Assistant (1)  
 PHIL 235 Sex and Love (3)  
 WS 495 - PHIL 495 Topics in Feminist Theory (3)  
 WS 303 - ANTH 303 Cross-Cultural Gender (3)  
 WS 406 - BIOL 406 DNA as Destiny: Genetics and Society (3)  
 WS 305 - ECON 305 The Economics of Poverty, Discriminations and Inequality (3)  
 WS 244 - HIST 244 Women in World Religion (3)  
 WS 350 - HIST 350 Women in European History (3)  
 WS 219 - SOC 219 Sociology of Sexual Behavior (3)  
 WS 308 - SOC 308 Social Gerontology (3)  
 WS 310 - SOC 310 Dominant-Subordinate Group Relations (3)  
 WS 320 - SOC 320 Sociology of the Family (3)  
 WS 333 - SOC 333 Sociology of Gender (3)

### **Minor in African American Studies – 18 credits**

AMCS 209 African American Humanities I: Roots (3)  
 AMCS 210 African American Humanities II: 1865-Present (3) **or**  
 AMCS 211 Contemporary African Americans (3)  
 AMCS 300 Theories and Methods in American Multicultural Studies (3)

Students will choose nine credits in electives from the following courses. AMCS 210 or AMCS 211 may be used only if not taken to meet a requirement above.

AMCS 210 African American Humanities II: 1865-Present (3) **or**  
 HIST 304 History of Africa (3)  
 AMCS 211 Contemporary African Americans (3)  
 AMCS 301 African American Music (3)  
 AMCS 302 Latinos of the Caribbean: Cuba, Dominican Republic, and Puerto Rico (3)  
 AMCS 315 African American Images in Film (3)  
 AMCS 325 African American Theatre (3)  
 AMCS 390 Topics in American Multicultural Studies (1-3)  
 AMCS 469 Internship (1-12)  
 ANTH 313 Understanding Contemporary Africa (3)  
 ENGL 356 African American Literature (3)  
 HIST 377 African-Americans in U.S. History (3)  
 MUS 215 History of Jazz (3)

### **Minor in American Indian Studies – 18 credits**

AMCS 102 Contemporary American Indians (3)  
 AMCS 270 American Indian Education (3)

AMCS 320 American Indian Belief Systems (3)  
AMCS 372 Dynamics of Prejudice and Oppression (3) **or**  
SOC 310 Dominant-Subordinate Group Relations (3)

Students will choose six elective credits from the following courses. For AMCS 390, AMCS 461, or AMCS 469 to count as a restricted elective in this minor, the content must focus on American Indian topics. With prior approval, the six elective credits may possibly include HIST 333 and/or HIST 311. All courses presented to satisfy the elective requirements of the minor are subject to the approval of the department chair.

AMCS 390 Topics in American Multicultural Studies (1-3)  
AMCS 461 Readings (1-3)  
AMCS 469 Internship (1-12)  
ANTH 210 Midwest/Plains Prehistory (3)  
ANTH 311 American Indians and the Environment (3)  
ANTH 315 North American Archaeology (3)  
ANTH 327 The Aztecs (3)  
ANTH 337 The Maya (3)  
ENGL 352 Native American Literature (3)

### **Minor in American Multicultural Studies – 18 credits**

AMCS 100 America's Mosaic (3)  
AMCS 300 Theories and Methods in American Multicultural Studies (3)

Students must select one course from the list below, plus one course from three of the four areas (African American Studies, American Indian Studies, Asian American Studies and Chicano/Latino Studies) for a total of 12 credits.

AMCS 233 Education and Multicultural America (3)  
AMCS 312 Origins of Multicultural America (3)  
AMCS 372 Dynamics of Prejudice and Oppression (3)  
AMCS 492 Capstone Seminar in American Multicultural Studies (3)  
ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)  
POL 265 International Protection of Human Rights (3)  
POL 333 Constitutional Law II: Civil Rights and Liberties (3)  
SOC 210 Social Problems (3)  
SOC 325 Social Movements (3)  
SOC 407 Contemporary Sociological Theory (3)  
WS 312 Rhetorics of Resistance: Feminist Responses from the Humanities (3)  
WS 415 Media and Diverse Identities (3)

### **African American Studies (Area 1)**

Student may take topics, readings, or internship courses as long as they have an African American Studies emphasis.

AMCS 209 African American Humanities I: Roots (3)  
AMCS 210 African American Humanities II: 1865-Present (3)  
AMCS 315 African American Images in Film (3)  
AMCS 325 African American Theatre (3)  
ENGL 356 African American Literature (3)

HIST 304 History of Africa (3)  
HIST 377 African-American in U.S. History (3)  
THTR 325 African American Theatre (3)

### **American Indian Studies (Area 2)**

Student may take topics, readings, or internship courses as long as they have an American Indian Studies emphasis.

AMCS 320 American Indian Belief Systems (3)  
ANTH 311 American Indians and the Environment (3)  
ANTH 315 North American Archaeology (3)  
ANTH 327 The Aztecs (3)  
ANTH 337 The Maya (3)  
ENGL 352 Native American Literature (3)

### **Asian American Studies (Area 3)**

Student may take topics, readings, or internship courses as long as they have an Asian American Studies emphasis.

AMCS 220 Contemporary Asian America (3)  
AMCS 368 Transnational Asian Adoption (3)  
ANTH 308/INTL 308 Migration and Human Adaptation (3)  
HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 373 Monsoon Asia: People and the Environment (3)  
INTL 364/POL 364 International Migration (3)  
JAPN 142 Introduction to Japanese Culture (3)

### **Chicano/Latino Studies (Area 4)**

Student may take topics, readings, or internship courses as long as they have an Chicano/Latino Studies emphasis.

AMCS 302 Latinos of the Caribbean: Cuba, Dominican Republic, and Puerto Rico (3)  
AMCS 303 Latinos in the United States (3)  
ANTH 327 The Aztecs (3)  
ANTH 337 The Maya (3)  
HIST 334 History of Latin America II (3)  
HIST 336 History of Mexico (3)

### **Minor in Asian American Studies – 18 credits**

AMCS 220 Contemporary Asian America (3)  
AMCS 312 Origins of Multicultural America (3) **or**  
AMCS 313 Modern Multicultural America (4)  
AMCS 368 Transnational Asian Adoption (3)  
ANTH 308 Migration and Human Adaptation (3) **or**  
INTL 308 Migration and Human Adaptation (3) **or**  
INTL 364 International Migration (3) **or**  
POL 364 International Migration (3)

Students will complete six semester credits in electives from the following courses. For 290, 390, 461 or 469 to count as an elective in this minor, the content must focus on Asian American Studies topics.

AMCS 290 Topics in American Multicultural Studies (1-3)  
AMCS 390 Topics in American Multicultural Studies (1-3)  
AMCS 461 Readings: American Multicultural Studies (1-3)  
AMCS 469 Internship (1-12)  
CHIN 132 Introduction to Chinese Culture (3)  
HIST 220 Asian-American Experience (3)  
HIST 301 East Asian History I (3)  
HIST 302 East Asian History II (3)  
HIST 373 Monsoon Asia: People and the Environment (3)  
JAPN 142 Introduction to Japanese Culture (3)

### **Minor in Chicano Latino Studies – 18 credits**

AMCS 103 Contemporary Chicanos (3)  
AMCS 203 Chicano Culture (3)  
AMCS 303 Latinos in the United States (3)  
AMCS 312 Origins of Multicultural America (3) **or**  
AMCS 313 Modern Multicultural America (4)

Students shall choose at least six semester credits from the courses listed. For 390, 461, or 469 to count as an elective in this minor, the content must focus on Chicano/Latino topics. In some cases, courses other than those listed here may be presented as electives. All courses presented to satisfy the elective requirements of the minor are subject to the approval of the department chair.

AMCS 302 Latinos of the Caribbean: Cuba, Dominican Republic, and Puerto Rico (3)  
AMCS 390 Topics in American Multicultural Studies (1-3)  
AMCS 461 Readings: American Multicultural Studies (1-3)  
AMCS 469 Internship (1-12)  
ANTH 327 The Aztecs (3)  
ANTH 337 The Maya (3)  
HIST 333 History of Latin America I (3)  
HIST 334 History of Latin America II (3)  
HIST 336 History of Mexico (3)  
SPAN 322 Latin American Culture and Civilization (4)  
SPAN 340 Introduction to Spanish Literature (4)

### **Minor in East Asian Studies – 21 credits**

Students must take one year of Chinese language or Japanese language.

Students must take a minimum of two courses (6-8 credits) in East Asian History. In addition, students must choose at least five credits in elective courses in close consultation with an advisor in the East Asian program. Courses may be taken from the list below. Other courses may apply if approved by the program coordinator. Equivalents of some of these courses may be taken through study abroad programs with approval of the program coordinator.

ART 338 Non-Western Art (4)  
 CHIN 101 Beginning Chinese I (4)  
 CHIN 102 Beginning Chinese II (4)  
 CHIN 132 Introduction to Chinese Culture (3)  
 CHIN 190 Topics in Chinese Language, Literature, and Culture (1-4)  
 CHIN 202 Intermediate Chinese II (4)  
 CHIN 290 Topics in Chinese Language, Literature, and Culture (1-4)  
 CHIN 297 Independent Study in Chinese - Intermediate Level (1-2)  
 CHIN 390 Topics in Chinese Language, Literature and Culture (1-4)  
 CHIN 397 Independent Study in Chinese - Advanced Level (1-3)  
 COMM 285 Intercultural Communication (3)  
 HIST 220 Asian-American Experience (3)  
 HIST 301 East Asian History I (3)  
 HIST 302 East Asian History II (3)  
 HIST 346 Modern China (3)  
 HIST 347 Modern Japan (3)  
 HIST 492 Senior Seminar (3-4)  
 HIST 497 Independent Study (1-3)  
 HUM 320 Humanities East and West (3)  
 JAPN 101 Beginning Japanese I (4)  
 JAPN 102 Beginning Japanese II (4)  
 JAPN 142 Introduction to Japanese Culture (3)  
 JAPN 190 Topics in Japanese Language, Literature, and Culture (1-4)  
 JAPN 201 Intermediate Japanese I (4)  
 JAPN 202 Intermediate Japanese II (4)  
 JAPN 290 Topics in Japanese Language, Literature, and Culture (1-4)  
 JAPN 297 Independent Study in Japanese - Intermediate Level (1-2)  
 JAPN 390 Topics in Japanese Language, Literature and Culture (1-4)  
 JAPN 397 Independent Study in Japanese: Advanced Level I (1-3)  
 PHIL 120 World Religions (3)

### **Minor in History – 21 credits**

HIST 101 Critical Issues in U.S. History (3)  
 HIST 104 World History I (3) **OR**  
 HIST 105 World History II (3)  
 HIST 121 History of the US to 1877 (3) **OR**  
 HIST 122 History of the US since 1877 (3)

Choose twelve credits from the following list:

AMCS 209 African American Humanities I: Roots (3)  
 AMCS 210 African American Humanities II: 1865-Present (3)  
 AMCS 302 Latinos of the Caribbean: Cuba, Dominican Republic and Puerto Rico (3)  
 AMCS 303 Latinos in the US (3)  
 AMCS 312 Origins of Multicultural America (3)  
 AMCS 313 Modern Multicultural America (4)  
 AMCS 315 African American Images in Film (3)  
 AMCS 325 African American Theatre (3)

HIST 220 Asian-American Experience (3)  
HIST 225 Intro to Latin American History (3)  
HIST 244 Women in World Religions (3)  
HIST 304 Africa in World History (3)  
HIST 312 Revolutionary Games (3)  
HIST 373 Monsoon Asia: People and the Environment (3)  
HIST 374 Plagues & Peoples: Disease and the Environment (3)  
HIST 379 Environmental History (3)

### **Minor in Spanish – 26 credits**

SPAN 201 Intermediate Spanish I (4)  
SPAN 202 Intermediate Spanish II (4)  
SPAN 211 Intermediate Spanish Conversation I (3)  
SPAN 212 Intermediate Spanish Conversation II (3)  
SPAN 301 Spanish Grammar & Composition I (3)  
SPAN 302 Spanish Grammar & Composition II (3)  
SPAN 311 Advanced Spanish Conversation I (3)  
SPAN 321 Iberian Culture and Civilization (3) **or**  
SPAN 322 Latin American Culture and Civilization (3)

### **Minor in Spanish Education – 32 credits**

LANG 471 Methods and Materials in Teaching Languages I (3)  
LANG 472 Methods and Materials in Teaching Languages II (3)  
SPAN 201 Intermediate Spanish I (4)  
SPAN 202 Intermediate Spanish II (4)  
SPAN 211 Intermediate Spanish Conversation I (3)  
SPAN 212 Intermediate Spanish Conversation II (3)  
SPAN 301 Spanish Grammar & Composition I (3)  
SPAN 302 Spanish Grammar & Composition II (3)  
SPAN 311 Advanced Spanish Conversation I (3)  
SPAN 321 Iberian Culture and Civilization (3) **or**  
SPAN 322 Latin American Culture and Civilization (3)

### **Minor in Teaching English as a Second Language – 26 credits**

ENGL 365 Language and Learning (3)  
LANG 457 Second Language Acquisition & Language Teaching (3)  
LANG 471 Methods and Materials in Teaching Languages I (3)  
LANG 472 Methods and Materials in Teaching Languages II (3)  
TESL 451 English Structures (3)  
TESL 454 Grammar for Teaching English as a Second Language (3)

One year of college level foreign language study or its equivalent (6-8 credits).

### **Minor in Women's Health – 20 credits**

COMH 200 Introduction to Health Promotion and Public Health (2)  
COMH 301 Women's and Children's Health (3)  
COMH 418 Global Health Issues (3)



WS 100 Women Today: Contemporary Women's Issues (3)

WS 420 Feminism in Global Perspective (3)

A minimum of six credits is required. Students majoring in Biology: one elective course must be from WS, HLTH, or COMH; the course may be cross-listed with WS. Students majoring in Community Health or Health: one elective course must be from WS or BIOL.

BIOL 323 Human Anatomy (4)

BIOL 349 Human Physiology (4)

BIOL 350 Microbiology (4)

BIOL 365 Developmental Biology (4)

BIOL 430 Immunobiology (3)

BIOL 438 Medical Microbiology (3)

HSAD 326 Epidemiology and Introductory Biostatistics (3)

HLTH 305 Introduction to Nutrition (3)

HLTH 330 Disease Prevention (2)

WS 247 Women's Studies: Perspectives and Intersections (3)

WS 300 Biology of Women (3) **or**

BIOL 300 Biology of Women (3)

WS 407 Inclusive Science: Women, Gender and Science (3)

### **Minor in Women's & Gender Studies – 21 credits**

WS 100 Women Today: Contemporary Women's Issues (3)

WS 247 Women's Studies: Perspectives and Intersections (3)

WS 324 Feminist Theory (3)

WS 412 Seminar in Women's Studies (3) **or**

WS 420 Feminism in Global Perspective (3)

Students must take nine credits and only two may be from the same disciplinary area.

COMH 301 Women's and Children's Health (3)

AMCS 372 Dynamics of Prejudice and Oppression (3)

HIST 375 Women in US History (3)

PSY 310 Psychology of Women (3)

WS 268 Global Sexualities in Pop Culture (3) *\*was WS 269*

WS 330 Gender, Justice and the Environment (3)

WS 334 Lesbian, Gay, Bisexual, Transgender and Queer Issues (3)

WS 390 Topics in Women's Studies (1-4)

WS 394 Research in Women's Studies (1-3) (may repeat once) *\*was WS 395*

WS 397 Independent Study (1-3) (may repeat once)

WS 407 Inclusive Science (3)

WS 410 Directed Readings in Women's Studies (1-3)

WS 412 Seminar in Women's Studies (3) (may repeat twice)

WS 415 Media and Diverse Identities (3)

WS 470 Undergraduate Teaching Assistant (1)

PHIL 235 Sex and Love (3)

WS 495 - PHIL 495 Topics in Feminist Theory (3)

WS 303 - ANTH 303 Cross-Cultural Gender (3)

WS 406 - BIOL 406 DNA as Destiny: Genetics and Society (3)  
 WS 305 - ECON 305 The Economics of Poverty, Discriminations and Inequality (3)  
 WS 244 - HIST 244 Women in World Religion (3)  
 WS 350 - HIST 350 Women in European History (3)  
 WS 219 - SOC 219 Sociology of Sexual Behavior (3)  
 WS 308 - SOC 308 Social Gerontology (3)  
 WS 310 - SOC 310 Dominant-Subordinate Group Relations (3)  
 WS 320 - SOC 320 Sociology of the Family (3)  
 WS 333 - SOC 333 Sociology of Gender (3)  
 WS 312 Rhetorics of Resistance (3)  
 WS 420 Feminism in Global Perspective (3) (if not taken as a core course)  
 WS 408 - ART 408 Women and Art (4)  
 WS 300 - BIOL 300 Biology of Women (3)  
 WS 246 - ENGL 246 Women in Literature (3)

### **Certificate in Women & Science – 13 credits**

Students must complete any Natural Science course with Lab and the following three courses:

WS 247 Women's Studies: Perspectives and Intersections (3)  
 WS 300/BIOL 300 Biology of Women (3)  
 WS 407 Inclusive Science: Women, Gender and Science (3)

### **Certificate of Proficiency in International English – 19 credits**

The Certificate of Proficiency in International English recognizes non-native speakers of English who have demonstrated a sufficient level of knowledge of English, literacy skills, and communication skills for the purposes of interacting personally and professionally in English with other English speakers around the world.

- Completion of secondary school, verified by a transcript evaluation service
- 1 year of demonstrated English language study
- Financial Self-sufficiency Statement
- US \$20.00 application fee
- Demonstrate proficiency in English in all four language domains
- Demonstrate knowledge of English morphology and syntax
- Apply knowledge of English to personal and professional tasks in all four language domains, such as listening and speaking in discussions and debates, reading sources of current events, or writing for technical or business purposes
- Demonstrate interpersonal communication skills and active learning strategies
- Develop familiarity with contemporary world events across a variety of topics
- Apply knowledge of contemporary world events to interpersonal communications in appropriate ways with a variety of people

#### **Skill/Content Area**

Pronunciation Accuracy

ELP 101 Pronunciation Lab I (1) **or**

ELP 201 Pronunciation Lab II (1) **or**

ELP 301 Pronunciation Lab III (1)

Oral Skills

ELP 302 Discussions and Debates (3) **or**

TEFL 101 Oral Presentations I (3) **and**  
TEFL 201 Oral Presentations II (3)

Reading

ELP 203 Reading III (3) **or**  
TEFL 103 Academic Reading I (3)

Composition

ELP 204 English Writing II (3) **or**  
TEFL 104 Academic Writing I (3)

Syntax

ELP 205 Intermediate English Syntax II (3) **or**  
TEFL 105 Advanced English Syntax I (3)

Vocabulary

ELP 206 General Academic Vocabulary (3) **or**  
TEFL 106 Vocabulary for Subject Studies I (3)

Contemporary World Events

ELP 307 Contemporary America and World Events (3)

**Certificate of Academic English Proficiency – 21 credits**

The Certificate of Academic English Proficiency recognizes non-native speakers of English who have demonstrated a high level of knowledge of English, literacy skills, and communication skills for academic purposes and recognizes that they are capable of engaging in higher academic study or professional activities in English.

- Completion of secondary school, verified by a transcript evaluation service if outside of U.S.
- TOEFL composite score of 54 or higher on the iBT, or completion of the MSUM Certificate of Proficiency in International English
- Financial Self-sufficiency Statement
- US \$20.00 application fee
- Demonstrate advanced proficiency in English in all four language domains
- Demonstrate advanced knowledge of English morphology and syntax
- Apply knowledge of English to academic tasks in all four language domains, such as essay writing, public speaking, and close reading of discipline-specific texts
- Demonstrate critical thinking skills, independent learning abilities, and active learning strategies for college success
- Develop familiarity with touchstones from a variety of American eras and sociocultural groups
- Apply knowledge of touchstones from American sociocultural groups and history to academic tasks, such as reading literature, engaging in classroom discussions, or writing essays.

**Skill/Content Area**

Public Speaking

TEFL 101 Oral Presentations I (3) **or**  
TEFL 201 Oral Presentations II (3) **or**  
COMM 100 Speech Communication (3)

Lectures & Note-taking

TEFL 102 Lectures & Note-taking I (3) **or**

TEFL 202 Lectures & Note-taking II (3)

Academic Reading

TEFL 103 Academic Reading I (3) **or**

TEFL 203 Academic Reading II (3)

Academic Writing

TEFL 104 Academic Writing I (3) **or**

TEFL 204 Academic Writing II (3) **or**

ENGL 101 English Composition I (3) **or**

ENGL 201 English Composition II (3)

English Syntax

TEFL 105 Advanced English Syntax I (3) **or**

TEFL 205 Advanced English Syntax II (3)

English Morphology

TEFL 106 Vocabulary for Subject Studies I (3) **or**

TEFL 206 Vocabulary for Subject Studies II (3)

American Culture

TEFL 107 American Childhood Classics (3) **or**

TEFL 207 American Cultural Classics (3)

## **Mathematics**

### **Mathematics Department**

**MacLean Hall 375, (218) 477-2274**

**Chair:** Adam Goyt

**Faculty:** Sayel Ali, Aggie Chadraa, Ellen Fagerstrom, Tamara Fitting, Damiano Fulghesu, Timothy Harms, Justin James, Bette Midgarden, Kristine Montis, Lian Ng, Carol Okigbo

The Mathematics Department offers four majors for students to choose from. Each of the four majors includes a core of mathematics courses that starts with the calculus sequence, along with additional upper-level mathematics courses that are specific to the major chosen. In addition, students in each major must complete a two-semester sequence of upper-level math courses where the second course builds directly upon the material learned in the first course and requires the student to synthesize the material.

The Bachelor of Arts (B.A.) degree in Mathematics is a general Mathematics degree that will prepare students to go to graduate school in Mathematics or to pursue other opportunities appropriate to a Mathematics major. The program includes 37 credits of Math core requirements, starting with the Calculus sequence. In addition, students will take 15 credits of upper level Math electives that may be chosen to meet the students' individual interests. Students must complete a two-semester sequence of upper level Math courses where the second course builds directly upon the material learned in the first course and requires the student to synthesize the material. The courses in that sequence are included in the core and elective courses that are

required for the program. Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests.

The Bachelor of Science (B.S.) degree in Mathematics Education will prepare students for a career as a secondary education teacher in Mathematics. The program includes 46 credits in Mathematics, starting with the Calculus sequence. These courses include ones that are core to any Mathematics major as well as ones that are specific to Mathematics Education. Additionally, 36 credits of courses that are core to any Secondary Education major are required. Every Mathematics major at Minnesota State University Moorhead requires a sequence of upper level courses. In the case of the Mathematics Education major, that sequence is Math 416 and the capstone experience of student teaching.

The Bachelor of Science (B.S.) degree in Mathematics with the Computational emphasis includes courses from several areas of mathematics, including mathematical analysis, statistics, and computer modeling and simulation. Many of the courses will involve heavy use of computers. Computational mathematics is focused on the skills needed to solve real-world problems. The program includes 41 credits of required Math courses, starting with the Calculus sequence, as well as two other Math courses chosen from specific lists. At least one of those two additional Math courses must be chosen to complete a two-semester upper level sequence. Typical choices for that upper level sequence for Computational majors would be Math 335/Math 435 or Math 366/466, although other options are available. Students should see their advisor for additional discussion. In addition, 15 credits of CSIS courses are required for this program. Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests.

The Bachelor of Science (B.S.) degree in Mathematics: Actuarial Science will prepare students for a career as an Actuary. The field requires knowledge of probability, statistics, finance, and economics. Actuaries often work in the financial services sector, including working for insurance companies, commercial banks, and investment banks. The program includes 44 credits of Mathematics courses, starting with the Calculus sequence. These courses include the two-semester upper level sequences of Math 321/421 and Math 335/435. In addition, the program requires 21 credits of related requirements from the fields of Economics, Computer Science, Finance, and Accounting. Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests.

Students who major in mathematics often declare a minor in a second field such as biology, chemistry, physics, computer science, or business.

The department also offers minors in Mathematics and Statistics that could complement any major, as well as a minor that is specific to those majoring in Elementary Inclusive Education.

### **B.A. Degree in Mathematics**

The BA in Mathematics is a general Mathematics degree that will prepare students to go to graduate school in Mathematics or to pursue other opportunities appropriate to a Mathematics major.

The program includes 33 credits of Math core requirements, starting with the Calculus sequence. In addition, students will take 15 credits of upper level Math electives that may be chosen to meet the students' individual interests. Students must complete a two-semester sequence of upper level Math courses where the second course builds directly upon the material learned in the first course and requires the student to synthesize the material. The courses in that sequence are included in the core and elective courses that are required for the program.

Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests.

To receive the B.A. Degree in Mathematics, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Understand the theory and applications of calculus and linear algebra.
- Develop the capacity for rigorous analytical thought and the ability to communicate ideas in a precise manner.
- Possess an awareness of the abstract nature of theoretical mathematics and the ability to write proofs.
- Possess an understanding of the breadth of the mathematical sciences and their deep inter-connecting principles.
- Ability to solve multi-step problems and perform complex tasks.
- Develop the ability to detect basic mathematical structures (patterns) and make generalizations from them.

All majors must complete the ETS Major Field Test in Mathematics.

#### Core Requirements (33 credits)

MATH 260 Computer Calculus (1)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

MATH 291 LaTeX (1)

MATH 311 Introduction to Proof and Abstract Mathematics (3)

MATH 323 Multi-Variable and Vector Calculus (4)

MATH 327 Introduction to Linear Algebra (3)

MATH 361 Intermediate Analysis I (4)

MATH 392 Sophomore Seminar (1)

MATH 476 Abstract Algebra I (4)

MATH 491 Mathematical Writing (3)

MATH 492 Senior Seminar (1)

#### Program Requirements

Students completing a BA in Mathematics must take an upper level sequence chosen from the following list.

MATH 311 AND MATH 411, OR

MATH 327 AND MATH 427, OR

MATH 361 AND MATH 362, OR

MATH 366 AND MATH 466, OR

MATH 476 AND MATH 477

Each of these courses is also either a Core Requirement or is included in the required 15 credits of upper level MATH electives.

### Related Requirement (3 credits)

CSIS 152 Introduction to Computers and Programming I-a (3)

### Restricted Electives (15 credits)

Students must take 15 credits of electives in mathematics. All electives must be at the 300 level or higher. Math 302, 303, 304, 316, 386, 402, 406, 416, and 486 may not be counted among the 15 required electives.

## **B.S. Degree in Mathematics**

A BS Degree in Mathematics with the Computational emphasis includes courses from several areas of mathematics, including mathematical analysis, statistics, and computer modeling and simulation. Many of the courses will involve heavy use of computers. Computational mathematics is focused on the skills needed to solve real-world problems.

The program includes 41 credits of required Math courses, starting with the Calculus sequence, as well as two other Math courses chosen from specific lists. At least one of those two additional Math courses must be chosen to complete a two-semester upper level sequence. Typical choices for that upper level sequence for Computational majors would be Math 335/Math 435 or Math 366/466, although other options are available. Students should see their advisor for additional discussion. In addition, 15 credits of CSIS courses are required for this program.

Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests.

To receive the B.S. Degree in Mathematics, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### Student Learning Outcomes

- Understand the theory and applications of calculus and linear algebra.
- Develop the capacity for rigorous analytical thought and the ability to communicate ideas in a precise manner.
- Possess an awareness of the abstract nature of theoretical mathematics and the ability to write proofs.
- Possess an understanding of the breadth of the mathematical sciences and their deep inter-connecting principles.
- Ability to solve multi-step problems and perform complex tasks.
- Develop the ability to detect basic mathematical structures (patterns) and make generalizations from them.

All majors must complete the ETS Major Field Test in Mathematics.

### Core Requirements (23 credits)

MATH 260 Computer Calculus (1)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

MATH 311 Introduction to Proof and Abstract Mathematics (3)

MATH 323 Multi-Variable and Vector Calculus (4)

MATH 327 Introduction to Linear Algebra (3)  
MATH 335 Intermediate Probability and Statistics I (4)

### **Computational Math Emphasis**

#### **Program Requirements (18 credits)**

MATH 291 LaTeX (1)  
MATH 355 Mathematical Modeling (3)  
MATH 361 Intermediate Analysis I (4) **or**  
MATH 435 Mathematical Statistics I (4)  
MATH 366 Differential Equations (3)  
MATH 450 Numerical Analysis I (4)  
MATH 491 Mathematical Writing (3)

Students completing a BS in Mathematics with a Computational emphasis must take an upper level sequence chosen from the following list.

MATH 335 AND MATH 435, OR  
MATH 366 AND MATH 466, OR  
MATH 311 AND MATH 411, OR  
MATH 327 AND MATH 427

The first course in each of these sequences is a required course for the emphasis, and the second course is an allowed option or upper level Math elective in the program.

#### **Related Requirements (15 credits)**

Students must take fifteen credits of approved Computer Science and Information Systems courses. These must include the following courses:

CSIS 152 Introduction to Computers and Programming Ia (3) **and**  
CSIS 153 Introduction to Computers and Programming Ib (3) **and**  
CSIS 252 Introduction to Computers and Programming II (3)

plus any two of the following CSIS courses:

CSIS 304 Databases (3)  
CSIS 335 Graphical User Interface Programming (3)  
CSIS 336 C#.Net Programming (3)  
CSIS 349 Networks and Data Communications (3)  
CSIS 352 Advanced Concepts in Programming (3)  
CSIS 360 Linux Programming and Development Tools (3)  
CSIS 446 Decision Support Systems (3)  
CSIS 450 Programming Languages (3)

#### **Restricted Electives (3 credits)**

Students must take three credits in mathematics at the level of Math 300 or higher and may not include Math 302, 303, 304, 316, 402, 406, 416, or 486.



## **B.S. Degree in Mathematics: Actuarial Science**

The B.S. Degree in Mathematics: Actuarial Science will prepare students for a career as an Actuary. The field requires knowledge of probability, statistics, finance, and economics. Actuaries often work in the financial services sector, including working for insurance companies, commercial banks, and investment banks. The program includes 44 credits of Mathematics courses, starting with the Calculus sequence. These courses include the two-semester upper level sequences of Math 321/421 and Math 335/435. In addition, the program requires 21 credits of related requirements from the fields of Economics, Computer Science, Finance, and Accounting. Students pursuing this degree have enough free electives to pursue a minor or to explore other academic interests. To receive the B.S. Degree in Mathematics: Actuarial Science, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Understand the theory and applications of calculus and linear algebra.
- Develop the capacity for rigorous analytical thought and the ability to communicate ideas in a precise manner.
- Possess an awareness of the abstract nature of theoretical mathematics and the ability to write proofs.
- Possess an understanding of the breadth of the mathematical sciences and their deep inter-connecting principles.
- Ability to solve multi-step problems and perform complex tasks.
- Develop the ability to detect basic mathematical structures (patterns) and make generalizations from them.

All majors must complete the ETS Major Field Test in Mathematics.

### **Core Requirements (23 credits)**

MATH 260 Computer Calculus (1)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 311 Introduction to Proof and Abstract Mathematics (3)  
MATH 323 Multi-Variable and Vector Calculus (4)  
MATH 327 Introduction to Linear Algebra (3)  
MATH 335 Intermediate Probability and Statistics I (4)

### **Program Requirements (21 credits)**

MATH 291 LaTeX (1)  
MATH 321 Financial Mathematics (3)  
MATH 336 Intermediate Probability and Statistics II (3)  
MATH 421 Actuarial Science I (3)  
MATH 435 Mathematical Statistics I (4)  
MATH 491 Mathematical Writing (3)  
MATH 361 Intermediate Analysis I (4) **or**  
MATH 450 Numerical Analysis I (4)

### **Related Requirements (21 credits)**

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)

CSIS 152 Intro to Computers and Programming I-a (3)  
ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
FINC 340 Financial Management (3)  
FINC 360 Principles of Investment (3)

## **B.S. Degree in Mathematics Education**

The B.S. Degree in Mathematics Education will prepare students for a career as a secondary education teacher in Mathematics. The program includes 46 credits in Mathematics, starting with the Calculus sequence. These courses include ones that are core to any Mathematics major as well as ones that are specific to Mathematics Education. Additionally, 36 credits of courses that are core to any Secondary Education major are required. Every Mathematics major at Minnesota State University Moorhead requires a sequence of upper level courses. In the case of the Mathematics Education major, that sequence is Math 416 and the capstone experience of student teaching. To receive the B.S. Degree in Mathematics Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits and a 2.5 GPA or higher is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

### **Student Learning Outcomes**

- Understand the theory and applications of calculus and linear algebra.
- Develop the capacity for rigorous analytical thought and the ability to communicate ideas in a precise manner.
- Possess an awareness of the abstract nature of theoretical mathematics and the ability to write proofs.
- Possess an understanding of the breadth of the mathematical sciences and their deep inter-connecting principles.
- Ability to solve multi-step problems and perform complex tasks.
- Develop the ability to detect basic mathematical structures (patterns) and make generalizations from them.

### **Core Requirements (59 credits)**

MATH 260 Computer Calculus (1)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 311 Introduction to Proof and Abstract Mathematics (3)  
MATH 323 Multi-Variable and Vector Calculus (4)  
MATH 327 Introduction to Linear Algebra (3)  
MATH 335 Intermediate Probability and Statistics I (4)

**Total: 23 credits**

### **Secondary Education Licensure Requirements**

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)

ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

Program Requirements (20 credits)

MATH 316 Teaching Mathematics in the Middle Grades (3)  
MATH 361 Intermediate Analysis I (4)  
MATH 416 Mathematics in the Secondary School (3)  
MATH 476 Abstract Algebra I (4)  
MATH 486 History of Mathematics (3)  
MATH 487 Foundations of Geometry (3)

Restricted Electives (3 credits)

Students must take three elective credits in mathematics. These electives must be at the 300 level or higher and may not include Math 302, 303, 304, or 406.

**Minor in Mathematics – 25 credits**

This minor is a general Mathematics minor that consists of the calculus sequence, a course in discrete mathematics, and an additional nine credits of upper-level electives that can be chosen to match the interests of the student, for a total of 25 credits.

MATH 210 Concepts in Discrete Mathematics (3)  
MATH 260 Computer Calculus (1)  
MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 323 Multi-Variable and Vector Calculus (4)

Students must take 9 credits of upper level Mathematics electives chosen from the following list.

MATH 311 Introduction to Proof and Abstract Mathematics (3)  
MATH 321 Financial Mathematics (3)  
MATH 327 Introduction to Linear Algebra (3)  
MATH 335 Intermediate Probability and Statistics I (4)  
MATH 336 Intermediate Probability and Statistics II (3)  
MATH 355 Mathematics Modeling (3)  
MATH 361 Intermediate Analysis I (4)  
MATH 362 Intermediate Analysis II (3)  
MATH 366 Differential Equations (3)  
MATH 392 Sophomore Seminar (1)  
MATH 411 Introduction to Combinatorics (3)  
MATH 421 Actuarial Science I (3)  
MATH 435 Mathematics Statistics I (4)  
MATH 450 Numerical Analysis I (4)  
MATH 476 Abstract Algebra I (4)  
MATH 486 History of Mathematics (3)

MATH 487 Foundations of Geometry (3)

MATH 492 Senior Seminar (1)

### **Minor in Mathematics: Elementary Inclusive Education Major – 20 to 22 credits**

This minor contains the Math courses that are expected of people who are applying for licensure to teach Mathematics for grades 5-8. Contact your advisor for current licensure information on whether the minor satisfies the State of Minnesota mathematics licensure requirements for grades 5-8 or the licensure requirements for other states. This minor is a concentration for Elementary Inclusive Education majors.

NOTE: Contact your advisor for current licensure information on whether the minor satisfies the State of Minnesota mathematics licensure requirements for grades 5-8 or the licensure requirements for other states. This minor is a concentration for Elementary Inclusive Education majors. MATH 303, 304, and 406 are part of the elementary education major and, thus, these courses are not listed among the requirements for this minor.

MATH 234 Introduction to Probability and Statistics (3) **or**

MATH 335 Intermediate Probability and Statistics I (4)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

MATH 210 Concepts in Discrete Mathematics (3)

MATH 316 Teaching Mathematics in the Middle Grades (3)

Students must take one of the four courses listed. Students who choose MATH 323 must take MATH 260 as a co-requisite.

MATH 323 Multi-Variable and Vector Calculus (4) **and**

MATH 260 Computer Calculus (1) **or**

MATH 327 Introduction to Linear Algebra (3) **or**

MATH 486 History of Mathematics (3) **or**

MATH 487 Foundations of Geometry (3)

### **Minor in Statistics – 23 to 24 credits**

This minor in Statistics includes one year of Calculus, Linear Algebra, and courses in the areas of Probability and Statistics.

#### **Student Learning Outcomes**

- Students will be able to apply a variety of calculus techniques to solve applied problems.
- Students will be able to apply a variety of techniques from linear algebra to solve applied and abstract problems.
- Students will know a variety of probability distributions and their applications.
- Students will be able to apply a variety of techniques from statistics to solve applied problems.
- Students will be able to determine which statistical technique to apply in a given situation.

MATH 235 Introduction to R (1)

MATH 260 Computer Calculus (1)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

MATH 327 Introduction to Linear Algebra (3)

MATH 335 Intermediate Probability & Statistics I (4)

MATH 336 Intermediate Probability & Statistics II (3)

Students must complete one of the following courses.

MATH 321 Financial Mathematics (3)

MATH 323 Multi-Variable and Vector Calculus (4)

MATH 421 Actuarial Science I (3)

MATH 435 Mathematical Statistics I (4)

## **Philosophy and Humanities**

**Philosophy and Humanities Department**

**MacLean Hall 279, (218) 477-2478**

**Chair:** Phil Mouch

**Faculty:** Marilea Bramer, Theodore Gracyk, Chang-Seong Hong

The study of philosophy develops the ability to solve problems, communicate, organize ideas and issues, assess pros and cons and boil down complex data. It is a reasoned pursuit of fundamental truths, a quest for understanding, a study of principles of conduct. It seeks to establish standards of evidence, to provide rational methods of resolving conflicts, and to create techniques for evaluating ideas and arguments. Philosophy develops the perspective of other individuals and cultures; enhances one's ability to perceive the relationships among various fields of study; and deepens one's understanding of the varieties of human experience. People trained in philosophy are prepared for many tasks—they can cope with change, or even move into new careers more easily.

Philosophy is an excellent second major or minor to accompany a major in any other discipline. The Minnesota State University Moorhead curriculum makes it possible to start a major in philosophy as late as the beginning of the junior year. Philosophy courses enhance understanding of communication and society (journalism); examine moral and legal reasoning (pre-law); and create a greater capacity for the integration of medical research and ethics (pre-med/ health professions). Courses are also available in the areas of general ethics, logic and philosophy of science (pre-engineering), and philosophy of religion (pre-seminary).

People trained in philosophy enter teaching professions (at all levels), medicine, law, computer science, management, publishing, sales, criminal justice and public relations. Most fields employ people educated in philosophy. Minnesota State University Moorhead's Philosophy Department guides students to become clear thinkers and good writers, skills valued in all professions. The generalist approach of philosophy gives graduates the ultimate in flexibility, the capability to adapt to changing ideas and technologies, and a framework of reason to guide one's personal life.

## **B.A. Degree in Philosophy**

To receive the B.A. Degree in Philosophy, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Ability to read and understand standard philosophical texts.
- Ability to write philosophical essays.
- Ability to engage in philosophical discussion and make oral presentations of their research.

- Know the views of major philosophers, know the primary issues in the major subject areas, and know both contemporary and non-mainstream approaches to philosophy.
- Ability to evaluate and construct philosophical arguments.
- Ability to engage in original philosophical research.

#### Core Requirements (16 credits)

PHIL 300 History of Ethics (3)

PHIL 303 Classical Philosophy (3)

PHIL 305 Modern Philosophy: 17th Century (3)

PHIL 306 Modern Philosophy: 18th Century (3)

PHIL 340 Symbolic Logic (3)

PHIL 492 Senior Project (1)

#### Restricted Electives

Students will need to earn at least fourteen credits of electives in philosophy, eight of which must be at the 300 level or above.

Students must take one course from a grouping of courses with a historical emphasis (PHIL 304, PHIL 307, PHIL 309, PHIL 355, PHIL 490, and PHIL 492/483) and will need departmental approval for application of PHIL 490 and/or PHIL 492/483 to this category. Students must also take PHIL 407 or PHIL 408.

PHIL 304 Medieval Philosophy (3) **or**

PHIL 307 19th Century Philosophy (3) **or**

PHIL 309 Continental Philosophy (3) **or**

PHIL 355 Existentialism (3) **or**

PHIL 490 Topics in Philosophy (1-4) **or**

PHIL 492 Major Philosophers (1-3)

PHIL 407 Theory of Knowledge (3) **or**

PHIL 408 Metaphysics (3)

#### Recommended Electives

There is no language requirement for the major in philosophy; however, students planning to do graduate work in philosophy should carefully consider the desirability of intensive work in one or more languages. German, French or Greek are typically most relevant to graduate work. Early consultation with a faculty advisor is recommended.

### **Minor in Humanities - Fine Arts – 21 credits**

HUM 101 Humanities through the Arts (3)

Students must choose two courses in each of three of the four following areas:

History and appreciation of the visual arts; Theatre, film and literature; Music; and at least two of the elective credits must be in a studio, applied, or performing course.

### **Minor in Philosophy – 21 credits**

PHIL 110 Practical Reasoning (3) **or**

PHIL 340 Symbolic Logic (3)

PHIL 215 Contemporary Moral Issues (3) **or**

PHIL 300 History of Ethics (3)

Eleven credits of Philosophy electives required. At least eight credits of the minor must be in 300 or 400 level courses.

At least three credits must be taken from the following list of courses. Students will need departmental approval for application of PHIL 490 and/or PHIL 492 to this category.

PHIL 303 Classical Philosophy (3)  
PHIL 304 Medieval Philosophy (3)  
PHIL 305 Modern Philosophy: 17th Century (3)  
PHIL 306 Modern Philosophy: 18th Century (3)  
PHIL 307 19th Century Philosophy (3)  
PHIL 355 Existentialism (3)  
PHIL 490 Topics in Philosophy (1-4)  
PHIL 492 Major Philosophers (1-3)

### **Certificate in Professional Ethics – 12 credits**

The Certificate in Professional Ethics provides background and depth in the concepts, theories, and contemporary issues in ethics and professional life. It is designed to prepare individuals to engage in reflection and to respond to the complex ethical issues they face in an increasingly global society.

PHIL 110 Practical Reasoning (3)  
PHIL 215 Contemporary Moral Issues (3)  
PHIL 311 Morals and Medicine (3)  
PHIL 312 Business Ethics (3) **OR**  
PHIL 318 Professional Ethics (3)

Appropriate sections of PHIL 390 Special Topics in Philosophy courses or PHIL 497 Independent Study may be substituted for required courses.

### **Physics & Astronomy**

**Physics and Astronomy Department**

**Hagen Hall 307, (218) 477-2141**

**Chair:** Steve Lindaas

**Faculty:** Juan Cabanela, Matthew Craig, Richard Lahti, Ananda Shastri, Linda Winkler

The Department of Physics and Astronomy offers three degrees: a Bachelor's degree in Physics, Bachelor's degree in Physics Education, and a Bachelor's degree in Physics Engineering. The Bachelor's degree in Physics may be further enhanced with an emphasis in astrophysics, emphasis in business, or an emphasis in medical physics. In addition, the department supports a minor in physics, a minor in medical physics and a minor in astronomy. Students interested in engineering may also pursue a dual degree in physics and engineering. The Department of Physics and Astronomy also coordinates the Bachelor's degree in Sustainability. The Sustainability degree allows for multiple tracks such as environmental science, business, construction management, operations management, energy science, geographic information systems and environmental policy.

### **Bachelor's Degree in Physics**

The physics major prepares students for a wide variety of careers from science and engineering to finance and

healthcare. Our students develop a skill set that is extremely valuable in a wide variety of jobs. The physics major also prepares students for further study in a graduate or professional school.

The major strengths of the physics program include:

- student-centered focus on teaching & learning;
- an emphasis on active learning using computers as tools for data collection, analysis, computation & modeling;
- opportunities for undergraduate research;
- involvement of students in outreach program and an award winning physics club.

The sequential nature of the physics curriculum, and the necessity to coordinate physics courses with courses taken in other departments make it imperative that a student considering a major or minor in physics or astronomy consult a member of the Department of Physics and Astronomy early in their career.

### **Bachelor's Degree in Physics-Emphasis in Astrophysics**

This program requires completion of a minimum of 120 credits and prepares the student to work with large data sets as well as possible graduate work in astrophysics. Majors with an astrophysics emphasis take core physics courses and several advanced astrophysics courses in both observational technique and theory which include extensive use of computing. Additional career options using these skills include GIS, remote sensing, and medical image processing.

### **Bachelor's Degree in Physics-Emphasis in Business**

This program requires completion of a minimum of 120 credits and prepares the physics student for a career in industry and who are interested in using their technical backgrounds in an entrepreneurial setting. In addition to the core physics courses, students in this emphasis take several business courses required for the certificate in entrepreneurship from the Paseka School of Business.

### **Bachelor's Degree in Physics-Emphasis in Medical Physics**

This program requires completion of a minimum of 120 credits and is a program for students interested in medical physics, a branch of applied physics that utilizes physics concepts and methods in the diagnosis and treatment of human disease to improve human health. The emphasis is preparation for graduate work and careers in radiation oncology, applied medical physics, and medical imaging quality control. A medical physics emphasis also serves students interested in biophysics, bioengineering and the technological aspects of biotechnology. In addition to the core physics courses, students in this emphasis take several chemistry and biology courses as well as specialized electives.

### **Bachelor's Degree in Physics Education**

This degree prepares the student to be certified to teach high-school physics in Minnesota. The program combines physics courses for the major with education courses needed for licensure. A student with this degree is strongly encouraged to also take additional courses in biology and geosciences to obtain the general science licensure in grades 5-8.

### **Bachelor's Degree in Engineering Physics**

This degree is designed for students who are curious about and want an applied understanding of how the natural world works. The major develops mathematical, modeling, computational, and lab skills applicable to a wide variety of engineering related careers. The major is also good preparation for graduate school in engineering and related fields.



### **Engineering/Physics Dual Degree**

Students have the option of obtaining a dual degree in physics (from MSUM) and engineering by completing the engineering curriculum at a university of their choice. The student completes the core physics and liberal arts and sciences curriculum requirements in their first three years at MSUM. The student then completes a final two years at a university completing coursework in their chosen engineering field. It is expected students in the dual degree program will obtain both a physics and engineering degree in five years. The dual degree advisor will work with individual students to ensure requirements are met for both programs.

### **Bachelor's Degree in Sustainability**

The Bachelor of Science in Sustainability is an excellent degree to prepare for emerging jobs in the green economy while striving to make the world a better place for future generations. MSUM's sustainability program is one of only a few universities in the country to focus on the entire spectrum of socio-environmental sustainability. The focus on sustainability within our societies crosses multiple disciplines with the shared goal of preserving and promoting a healthy planet; adding a second major or minor is encouraged and can often be achieved within 120 total credits. There are suggested tracks available through advising to pursue sustainability applications within environmental science, operations management, business, public policy, construction management, energy science and geographic information systems.

The Sustainability program is designed to give students an understanding of the need for long-term sustainable practices in our lifestyles and economy. As more and more companies adopt practices to decrease operating costs while also reducing their impact on the environment, they hire sustainability coordinators to manage these tasks. The future outlook for these positions looks bright as companies seek to maintain strong commitments to the environment and employ strategies to increase their economic competitiveness. Green jobs involve all aspects of employment in renewable energy or sustainability efforts. According to the US Bureau of Labor Statistics, green jobs are either:

- jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.
- jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.

The number of industries that offer green employment opportunities are diverse and job titles do not always contain "sustainability". Green jobs offer wages that run approximately 13% higher than the average job in the US, with green energy jobs running 20% higher (US Bureau of Labor Statistics 2017).

### **Minor in Astronomy**

The minor in astronomy is designed for students who have an interest in observational astronomy and earth sciences. A student pursuing a minor in astronomy must have a solid mathematical foundation in algebra and trigonometry.

### **Minor in Physics**

This minor is designed for the student who wants to have a strong resume in physical science. Students pursuing a closely allied major such as mathematics, chemistry, or computer science often add this minor. A student pursuing a physics minor must have a solid mathematical foundation in algebra, trigonometry, and calculus.

### **Minor in Medical Physics**

The minor in medical physics is a program designed for students in biosciences and chemistry related fields,

who are looking for additional expertise in a branch of applied physics that utilizes physics concepts and methods in the diagnosis, treatment and improvement of human health. A student pursuing a minor in medical physics must have a solid mathematical foundation in algebra, trigonometry and calculus.

### **Minor in Sustainability**

The sustainability minor is an excellent addition to any major. It has an interdisciplinary focus with the shared goal of understanding, preserving and promoting a healthy planet. MSUM is one of only a few universities in the country to approach sustainability across the curriculum.

### **B.S. Degree in Engineering Physics**

The Engineering Physics major is designed for students who are curious about and want an applied understanding of how the natural world works. This major develops mathematical, modeling, computational, and lab skills that are applicable to a wide variety of engineering-related careers. The major is also good preparation for graduate school in engineering and related fields. Students have the option of obtaining a dual degree in physics (from MSUM) and engineering by completing the engineering curriculum at a university of their choice. To receive the B.S. Degree in Engineering Physics, the student must meet the minimum university requirements and specific requirements for the program/emphasis. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Demonstrate basic knowledge of experimental physics and engineering concepts.
- Apply analytical thinking, mathematical analysis, and computational techniques to the solution of problems in engineering.
- Reach both quantitative and qualitative conclusions from experimental data.
- Apply analytical thinking, instrumentation skills, and computer techniques to perform experiments.
- Participate in an internship that develops engineering design skills OR Conduct an independent research project that uses engineering design principles.

#### **Core Requirements (31 credits)**

PHYS 200 General Physics I with Lab (4)  
PHYS 201 General Physics II with Lab (4)  
PHYS 202 Introduction to 20th Century Physics (3)  
PHYS 305 Experimental Physics I (3)  
PHYS 315 Physics Seminar (1)  
PHYS 322 Elementary Modern Physics (3)  
PHYS 350 Computational Methods for Physical Science (3)  
PHYS 330 Intermediate Mechanics (4)  
PHYS 306 Experimental Physics II (3)

#### **Program Requirements**

Students who major in Engineering Physics and choose to pursue the optional dual degree by completing an engineering degree at another university will be exempted from the MSUM graduation requirement that eight of the last twelve credits be completed at MSUM for the Engineering Physics degree.

#### **Related Requirements (32 credits)**

MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 323 Multi-Variable and Vector Calculus (4)

MATH 327 Linear Algebra (3)  
MATH 366 Differential Equations (3)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
CSIS 153 Introduction to Computers and Programming I-b (3)  
CHEM 150 General Chemistry I (3) **and** CHEM 150L General Chemistry I Lab (1)  
CHEM 210 General Chemistry II (3) **and** CHEM 210L General Chemistry II Lab (1)

#### Restricted Electives (9 credits)

Students must complete one of the two options below:

ENG 469 Internship (3) **OR**  
PHYS 342 Introduction to Research (1) **AND**  
PHYS 492 Senior Project (2)

Students must complete six credits from the list below:

PHYS 312 Analog Electronics (3)  
PHYS 318 Biophysics and Medical Imaging (3)  
PHYS 325 Optics (3)

In addition, students must complete at least three credits from the list below:

PHYS 370 Electromagnetic Theory (4)  
PHYS 399 Thermodynamics (3)  
PHYS 430 Quantum Mechanics (3)  
CHEM 450 Physical Chemistry I (3) **AND**  
CHEM 455 Physical Chemistry I Lab (1)

Students may substitute an appropriate engineering course at the 300 level or higher for any courses above.

#### Recommended Electives

We recommend students consider completing the courses listed below. Students are not required to complete these courses. Students are encouraged to take Math 260 with Math 261.

MATH 210 Discrete Math (3)  
MATH 260 Computer Calculus (1)  
CSIS 252 Introduction to Computer Programming II (3)  
ENGL 387 Technical Report Writing (3)

Students are particularly encouraged to consider an internship, which can be completed during the summer:  
ENG 469 Internship (1-3)

### **B.S. Degree in Physics**

The Physics major is designed for students who are curious about and want to understand how the natural world works. Our major develops math, modeling, computational, and problem-solving skills that are applicable to a wide variety of careers. We purposefully integrate computational techniques along with quantitative techniques into all our major courses. Recent majors have gone on to careers in education, engineering, computer programming, medical physics, astrophysics research, and finance. The Physics major with Medical Physics emphasis is designed for students who are interested in the application of physics concepts and methods in the diagnosis and treatment of human disease to improve human health. This is preparation for graduate work and careers in radiation oncology, applied medical physics, and medical imaging quality control. In addition to the core physics courses, students in this emphasis take several chemistry and biology courses as well as specialized electives. The Physics major with Astrophysics emphasis

prepares students to work with large data sets. Possible careers using these skills include GIS, remote sensing, and medical image processing, in addition to possible graduate work in astrophysics. Majors with an astrophysics emphasis take several advanced astrophysics courses in both observational techniques and theory which include extensive use of computing. The Physics major with Business emphasis is designed for students who are interested in using their technical backgrounds in an entrepreneurial setting. Possible careers include product development, technical sales, and business ownership. In addition to the core physics courses, students in this emphasis take several business courses required for the Certificate in Entrepreneurship from the Paseka School of Business. To receive the B.S. Degree in Physics, the student must meet the minimum university requirements and specific requirements for the program/emphasis. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

Graduates of our program can demonstrate the ability to:

- model physical systems conceptually.
- model physical systems analytically.
- model physical systems computationally.
- experimentally test physical models using contemporary techniques and equipment.
- apply the scientific method to studying a physical system.
- communicate professionally both in written and oral forms appropriate to the discipline.

#### Core Requirements (31 credits)

PHYS 200 General Physics I w/Lab (4)

PHYS 201 General Physics II w/Lab (4)

PHYS 202 Introduction to 20th Century Physics (3)

PHYS 305 Experimental Physics I (3)

PHYS 315 Physics Seminar (1)

PHYS 322 Elementary Modern Physics (3)

PHYS 350 Computational Methods for Physical Science (3)

PHYS 330 Intermediate Mechanics (4)

PHYS 306 Experimental Physics II (3)

PHYS 342 Introduction to Research (1)

PHYS 492 Senior Project (2)

The algebra-based physics courses PHYS 160 College Physics I w/Lab (4) **and** PHYS 161 College Physics II w/Lab (4) may be substituted for the calculus-based physics courses PHYS 200 General Physics I w/Lab (4) **and** PHYS 201 General Physics II w/Lab (4).

#### Related Requirements (18 credits)

ENGL 387 Technical Report Writing (3)

MATH 261 Calculus I (4)

MATH 262 Calculus II (4)

MATH 323 Multi-Variable and Vector Calculus (4)

MATH 366 Differential Equations (3)

#### Electives (18 credits)

Students must complete 18 elective credits in Physics (PHYS) or Astronomy (AST) at the 300 level or higher (not including PHYS 385 and PHYS 440). These courses cannot be from the core or related requirements. A max of 2 credits allowed towards PHYS 469 (internship) and PHYS 394 (research seminar).

### Recommended Electives

We recommend students consider completing the courses listed below. Students are not required to complete these courses. Students are encouraged to take Math 260 with Math 261.

MATH 260 Computer Calculus (1)

MATH 327 Linear Algebra (3)

### **Business Emphasis**

#### Program Requirements (15 credits)

Students must complete the core requirements listed for the major in addition to completing the following courses required for the Certificate of Entrepreneurship from the Paseka School of Business.

ENTR 229 Introduction to Entrepreneurship (3)

ENTR 230 Entrepreneurial Finance (3)

ENTR 231 Entrepreneurial Leadership and Organization (3)

ENTR 232 Entrepreneurial Marketing (3)

ENTR 309 Building a Workable Business Plan (3)

#### Restricted Electives (3 credits)

Students must complete at least 3 credits from the courses listed below.

PHYS 312 Analog Electronics (3)

PHYS 318 Biophysics and Medical Imaging (3)

PHYS 325 Optics (3)

PHYS 370 Electromagnetic Theory (4)

PHYS 399 Thermodynamics (3)

PHYS 430 Quantum Mechanics (3)

### Recommended Electives

We recommend students consider completing the courses listed below. Students are not required to complete these courses.

MKTG 270 Principles of Marketing (3)

MGMT 260 Principles of Management (3)

MGMT 380 Operations Management (3)

Students are encouraged to take Math 260 with Math 261.

MATH 260 Computer Calculus (1)

MATH 327 Linear Algebra (3)

### **Astrophysics Emphasis**

#### Program Requirements (22 credits)

Students must complete the core requirements listed for the major in addition to the following list of courses.

PHYS 370 Electromagnetic Theory (4)

PHYS 399 Thermodynamics (3)

PHYS 430 Quantum Mechanics (3)

AST 361 Stellar Astrophysics (3)  
AST 362 Galactic and Extragalactic Astrophysics (3)  
AST 365 Cosmology (3)  
AST 366 Observational Astronomy (3)

Restricted Electives (6 credits)

Students must complete one of the following three courses:

AST 102 Solar System Astronomy (3)  
AST 104 Stellar Astronomy (3)  
HON 324 Life and Death in the Universe (3)

Students must complete at least three credits selected from the courses listed below:

AST 360 Planetary Science (3)  
AST 390 Projects in Advanced Astronomy (1-3)  
AST 490 Topics in Astronomy (1-3)  
PHYS 312 Analog Electronics (3)  
PHYS 325 Optics (3)  
PHYS 390 Topics in Physics (1-3)  
PHYS 469 Internship (1-2)

Recommended Electives

We recommend students consider completing the courses listed below. Students are not required to complete these courses.

MKTG 270 Principles of Marketing (3)  
MGMT 260 Principles of Management (3)  
MGMT 380 Operations Management (3)

Students are encouraged to take Math 260 with Math 261.

MATH 260 Computer Calculus (1)  
MATH 327 Linear Algebra (3)

**Medical Physics Emphasis**

Program Requirements (21 credits)

Students must complete the core requirements listed for the major in addition to completing the following list of courses.

PHYS 312 Analog Electronics (3)  
PHYS 318 Biophysics and Medical Imaging (3)  
PHYS 370 Electromagnetic Theory (4)  
PHYS 399 Thermodynamics (3)  
CHEM 150 General Chemistry I (3)  
CHEM 150L General Chemistry Laboratory I (1)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry II Lab (1)

### Recommended Electives

We recommend students consider completing the courses listed below. Students are not required to complete these courses.

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
BIOL 323 Human Anatomy (4)  
BIOL 349 Human Physiology (4)  
CHEM 350 Organic Chemistry I (3)  
CHEM 360 Organic Chemistry II (3)  
PHYS 325 Optics (3)  
PHYS 430 Quantum Mechanics (3)

Students are encouraged to take Math 260 with Math 261.

MATH 260 Computer Calculus (1)  
MATH 327 Linear Algebra (3)

### **B.S. Degree in Physics Education**

The Physics Education major is designed for students who are interested in teaching high school physics. This major develops the mathematical, modeling, computational and lab skills necessary to be a successful educator. Students take practical courses covering concepts and activities relevant to the physical science topics that they will be teaching. Students have the opportunity to develop and practice pedagogical skills by working as a Learning Assistant for their physics courses. Students are also encouraged to participate in the nationally award winning Society of Physics Students which is involved in a range of outreach events. In addition to formal and informal education, students may participate in various research projects. A student pursuing this degree is strongly encouraged to also take additional life science and earth science courses to obtain the general science licensure in grades 5 through 8.

To receive the B.S. Degree in Physics Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits and a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits).

Graduates of our program can demonstrate the ability to:

- model physical systems conceptually.
- model physical systems analytically.
- model physical systems computationally.
- experimentally test physical models using contemporary techniques and equipment.
- apply the scientific method to studying a physical system.
- communicate professionally both in written and oral forms appropriate to the discipline.

### Core Requirements (33 credits)

PHYS 200 General Physics I with Lab (4)  
PHYS 201 General Physics II with Lab (4)  
PHYS 202 Introduction to 20th Century Physics (3)  
PHYS 305 Experimental Physics I (3)  
PHYS 322 Elementary Modern Physics (3)

PHYS 350 Computational Methods (3)  
PHYS 330 Intermediate Mechanics (4)  
PHYS 312 Analog Electronics (3)  
PHYS 325 Optics (3)  
PHYS 440 Secondary Science Teaching Methods (3)

Students may substitute PHYS 160 and PHYS 161 for PHYS 200 and PHYS 201

**Total Credits: 33**

#### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)

**Total Credits: 36**

#### Related Requirements (23 credits)

MATH 261 Calculus I (4)  
MATH 262 Calculus II (4)  
MATH 323 Multi-Variable and Vector Calculus (4)  
MATH 366 Differential Equations (3)  
CHEM 150 General Chemistry I (3)  
CHEM 150L General Chemistry Laboratory I (1)  
CHEM 210 General Chemistry II (3)  
CHEM 210L General Chemistry II Lab (1)

#### Recommended Electives

The following courses, plus one year of chemistry and one year of physics, are required for the middle-level science endorsement (grades 5-8). You will also need to have a middle-level practicum experience or middle-level student teaching experience in addition to your secondary student teaching experience.

BIOL 111 Cell Biology (4)  
BIOL 115 Organismal Biology (4)  
GEOS 115 Physical Geology (4)  
GEOS 116 Historical Geology (3)  
GEOS 360 Planetary Science (3)

### **B.S. Degree in Sustainability**

The Bachelor of Science in Sustainability is an excellent degree to prepare for emerging jobs in the green economy while striving to make the world a better place for future generations. MSUM's sustainability



program is one of only a few universities in the country to focus on the entire spectrum of socio-environmental sustainability. The focus on sustainability within our societies crosses multiple disciplines with the shared goal of preserving and promoting a healthy planet; adding a second major or minor is encouraged and can often be achieved within 120 total credits. There are suggested tracks available through advising to pursue sustainability applications within environmental science, operations management, business, public policy, construction management, energy science and geographic information systems.

The Sustainability program is designed to give students an understanding of the need for long-term sustainable practices in our lifestyles and economy. As more and more companies adopt practices to decrease operating costs while also reducing their impact on the environment, they hire sustainability coordinators to manage these tasks. The future outlook for these positions looks bright as companies seek to maintain strong commitments to the environment and employ strategies to increase their economic competitiveness. Green jobs involve all aspects of employment in renewable energy or sustainability efforts. According to the US Bureau of Labor Statistics, green jobs are either: jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources or jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources. The number of industries that offer green employment opportunities are diverse and job titles do not always contain "sustainability". Green jobs offer wages that run approximately 13% higher than the average job in the US, with green energy jobs running 20% higher (US Bureau of Labor Statistics 2017).

To receive the B.S. Degree in Sustainability, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Explore the concept of sustainability within the context of socio-environmental systems. (*Nature of Sustainability, SUST 200*)
- Evaluate how humans impact the surface of the earth and the biosphere, and the consequential effects on ecosystem services. (*Physical Geology, GEOS 115 or Exploring Biology, BIOL 370*)
- Examine the relationships between civilization, society and energy use and look at possible steps to a sustainable energy and environmental future. (*Energy and the Environment, PSCI 378*)
- Identify issues faced by developing countries in the conflict between rapid economic development and the threat of environmental degradation. (*Big City, Big Impact, ENGL 407*)
- Describe how class, gender, race, ethnicity, nation status and other identities intersect with relationships within environmental justice and activism. (*Gender, Justice and the Environment, WS 330*)
- Examine the motivations behind humans' decisions to modify ecosystems throughout the world, and the effects that environmental change has had on the peoples and ecosystems throughout human history. (*Environmental History, HIST 379*)
- Interpret any environmental issue within a systems thinking framework. (*Systems Thinking, SUST 421*)
- Articulate the ethical responsibilities humans have for the non-human world and for future human generations. (*Environmental Dilemmas, SUST 432*)
- Recognize and apply sustainable ideas and practices to potential career opportunities. (*Internship, SUST 469 and Capstone Seminar, SUST 492*)

#### Core Requirements (25 credits)

SUST 200 Nature of Sustainability (3)

ENGL 407 Big City, Big Impact (3)  
HIST 379 Environmental History (3)  
PSCI 378 Energy and Environment (3)  
WS 330 Gender, Justice and the Environment (3)  
SUST 421 Systems Thinking (3)  
SUST 432 Environmental Dilemmas(3)  
SUST 469 Internship (3)  
SUST 492 Seminar: Sustainability Capstone (1)

Related Requirements (3 credits)

Must take a 3 credit college algebra course or above.

Restricted Electives (3-4 credits)

Take one course from the list of courses below.

GEOS 115/GEOS 115L Physical Geology (4)  
GEOS 117/GEOS 117L Water, Land, and People (4)  
BIOL 370 Exploring Biology (3)

Electives (18 credits)

Take 6 additional elective courses 3 of which are upper level courses.

All LASC 10 courses are automatically included as possible elective courses. Additional courses listed below have been identified as "Green Leaf" courses after approval by the Sustainability Programmatic Committee.

ANTH 308 Migration and Human Adaptation (3)  
ANTH 325 Reading Landscape: Ways of Seeing (3)  
BIOL 305 General Botany (3)  
BIOL 248 Introduction to Public Health (3)  
CHEM 102 Environmental Chemistry (3)  
GEOS 115/GEOS 115L Physical Geology (4)  
GEOS 117/GEOS 117L Water, Land, and People (4)  
GEOS 205 Thinking Spatially (3)  
GEOS 207 GPS Field Techniques (3)  
GEOS 210 Cartography (3)  
GEOS 407 Spatial Analysis (3)  
GEOS 307 Introduction to GIS (3)  
GEOS 320 Economic Geography (3)  
GEOS 325 Reading Landscapes: Ways of Seeing (3)  
GEOS 340 Economic and Environmental Geology (3)  
GEOS 370 Structural Geology and Mapping (3)  
GEOS 415 Reading Geochemical Fingerprints (3)  
GEOS 450 Field Geology (3)  
POL 120 American National Government and Politics (3)  
POL 160 International Relations (3)  
POL 352 Political Problems in Developing Countries (3)  
POL 361 International Political Economy (3)  
ART 345 Art of Social and Environmental Justice (3)

### **Minor in Astronomy – 22 to 24 credits**

The Minor in Astronomy is designed for students who have an interest in observational astronomy and earth sciences. A student pursuing a minor in astronomy must have a solid mathematical foundation in algebra and trigonometry and will complete an additional 22-24 credits.

Students must take two of the following three courses:

AST 102 Solar System Astronomy (3)

AST 104 Stellar Astronomy (3)

AST 324 Life and Death in the Universe (3)

Must take College Physics I and II or General Physics I and II.

PHYS 160 and PHYS 161 College Physics I and II w/lab OR

PHYS 200 and PHYS 201 General Physics I and II w/lab

Depending on elective choices, student will earn eight to ten credits in this area.

AST 190 Topics in Astronomy (1-3)

AST 360 Planetary Science (3)

AST 361 Stellar Astrophysics (3)

AST 362 Galactic and Extragalactic Astrophysics (3)

AST 365 Cosmology (3)

AST 366 Observational Astronomy (3)

AST 390 Projects in Advanced Astronomy (1-3)

GEOS 115 Physical Geology (4)

### **Minor in Medical Physics – 27 credits**

The Minor in Medical Physics is a program designed for students in biosciences, chemistry and related fields, who are looking for additional expertise in a branch of applied physics that utilizes physics concepts and methods in the diagnosis, treatment and improvement of human health. A student pursuing a Minor in Medical Physics must have a solid mathematical foundation in algebra, trigonometry, and calculus and will complete an additional 27 credits.

PHYS 200 General Physics I with Lab (4)

PHYS 201 General Physics II with Lab (4)

PHYS 202 Introduction to 20th Century Physics (3)

PHYS 305 Experimental Physics I (3)

PHYS 315 Physics Seminar (1)

PHYS 322 Elementary Modern Physics (3)

PHYS 312 Analog Electronics (3)

PHYS 318 Biophysics and Medical Imaging (3)

PHYS 306 Experimental Physics II (3)

### **Minor in Physics – 24 credits**

This minor is designed for the student who wants to have a strong resume in physical science. Students pursuing a closely allied major such as mathematics, chemistry, or computer science often add this minor. A student pursuing a Minor in Physics must have a solid mathematical foundation in algebra, trigonometry, and calculus and will complete 24 additional credits.

PHYS 200 General Physics I with Lab (4)  
PHYS 201 General Physics II with Lab (4)  
PHYS 202 Introduction to 20th Century Physics (3)  
PHYS 305 Experimental Physics I (3)  
PHYS 315 Physics Seminar (1)  
PHYS 322 Elementary Modern Physics (3)  
PHYS 306 Experimental Physics II (3)

Students may substitute PHYS 160/PHYS 161 for PHYS 200/PHYS 201.

A maximum of 2 credits of PHYS 394, PHYS 315, or PHYS 469 may be used towards the total credits for the minor.

Students must earn three elective credits in Physics courses at the 300 level or higher.

### **Minor in Sustainability – 24 to 25 credits**

The sustainability minor is an excellent addition to any major. It has an interdisciplinary focus with the shared goal of understanding, preserving and promoting a healthy planet. MSUM is one of only a few universities in the country to approach sustainability across the curriculum. The Sustainability Minor consists of 24-25 credits.

#### **Student Learning Outcomes**

- Explore the concept of sustainability within the context of socio-environmental systems. (Nature of Sustainability, SUST 200)
- Evaluate how humans impact the surface of the earth and the biosphere, and the consequential effects on ecosystem services. (Physical Geology, GEOS 115, Water, Land and People, GEOS 117, or Exploring Biology, BIOL 370)
- Examine the relationships between civilization, society and energy use and look at possible steps to a sustainable energy and environmental future. (Energy and the Environment, PSCI 378)
- Identify issues faced by developing countries in the conflict between rapid economic development and the threat of environmental degradation. (Big City, Big Impact, ENGL 407)
- Describe how class, gender, race, ethnicity, nation status, and other identities intersect with relationships within environmental justice and activism. (Gender, Justice, and the Environment, WS 330)
- Examine the motivations behind humans' decisions to modify ecosystems throughout the world, and the effects that environmental change has had on the peoples and ecosystems throughout human history. (Environmental History, HIST 379)
- Interpret any environmental issue within a systems thinking framework. (Systems Thinking, SUST 421)
- Articulate the ethical responsibilities humans have for the non-human world and for future human generations. (Environmental Dilemmas, SUST 432)

ENGL 407 Big City, Big Impact (3)  
HIST 379 Environmental History (3)  
PSCI 378 Energy and Environment (3)  
SUST 200 Nature of Sustainability (3)  
SUST 421 Systems Thinking (3)

SUST 432 Environmental Dilemmas (3)  
WS 330 Gender, Justice and the Environment (3)

Take one course from the list of electives.  
GEOS 115/GEOS 115L Physical Geology (4)  
GEOS 117/GEOS 117L Water, Land, and People (4)  
BIOL 370 Exploring Biology (3)

## **Professional Management**

**Professional Management Department**  
**Hagen Hall 211, (218) 477-2104**

**Co-Chairs:** Pam McGee and Scott Seltveit

**Program Coordinator Construction Management:** Rachel Axness

**Program Coordinator Operations and Project Management:** Pam McGee

**Faculty:** Norma Anderson, Rachel Axness, Joshua Behl, Pam McGee, Atif Osmani, Scott Seltveit

The **Professional Management** department offers majors, minors, and certificates in applied management. Applied management is a blend of theory, practice, and emerging technologies. The department works closely with industry to develop students into graduates who have the current applicable skills based in solid theory that industry requires.

### **Construction Management Mission Statement:**

- To maintain a nationally accredited construction management program, which will produce graduates who will have the technical, managerial and general knowledge necessary to enter and advance professionally in the construction industry.
- Provide an environment, which encourages students and faculty to engage in professional development, critical thinking, and creative endeavors.
- Promote continuous improvement of teaching, learning and program curriculum.

### **Construction Management Career Information**

Construction Management (CM) is a professional program that specifically trains graduates to manage, coordinate, and supervise the construction process from conceptual development through final construction on a timely and economical basis. Throughout the program, students learn the responsibilities of coordinating and managing people, materials, processes, budgets, schedules, and contracts, as well as the safety of employees and the general public.

Construction managers hold a variety of job titles, such as project manager, field engineer, estimator, scheduler, or construction manager. On large projects construction managers may work for a general contractor – the firm with the overall responsibility of all construction activities on the job. They oversee the completion of all construction processes in accordance with the engineers or architect's drawings and specification. From 2000 through 2010, CM graduates experienced excellent job placement and average starting salaries often exceeding \$50,000.

The construction management program has a laptop requirement. All CM majors who enroll in CM 230, Estimating I, are required to purchase and utilize a laptop computer in the subsequent CM coursework. CM 230 is the beginning of a sequence of courses where laptops will be integrated into the learning process. Freshman and sophomore level CM courses are exempt from this requirement unless students enroll in the estimating sequence their sophomore year.

### **Construction Management Program Assessment**

The Construction Management (CM) program at MSU Moorhead is accredited by the American Council of Construction Education (ACCE), which establishes standards and criteria for excellence in construction education.

Assessment of the construction management program must satisfy two entities. First and foremost, assessment is a requirement of the ACCE and the CM program must meet or exceed those standards. ACCE requires a comprehensive assessment plan including program outcomes and student performance outcomes, which are outlined below. In addition, Minnesota State University Moorhead (MSUM) requires that all degree-granting programs have a student outcomes assessment plan. This assessment plan is designed to satisfy both entities.

### **Operations Management and Project Management Program Mission Statement:**

To transform lives by providing rigorous and applied education to our students.

### **Operations Management Program Overview**

The Operations Management (OM) degree is specifically designed for transfer students who have earned an Associate of Applied Science, Associate of Science, or a Diploma in a field from an accredited institution in a field of study related to Industrial Technology. The technical courses coupled with the upper division technical management courses provide the operations management graduate with a unique advantage in today's job market. This "Fast Track" BS degree is appropriate for recent technical college graduates as well as persons in the incumbent workforce seeking an applied educational experience to enhance their competitive advantage and promotional opportunities.

Students identifying operation management as their intended major at MSUM may transfer up to 48 technical credits. A minimum of 30 technical credits will be applied to the technical portion of the OM major. Any remaining technical area credits may be transferred and designated as "free electives" counting toward graduation requirements. The AAS degree transfer may not exceed 64 semester hours including 16 to 22 semester hours in liberal studies. All university graduation requirements apply for the 2+2 transfer degree. The program is structured so that a student may complete the degree with two additional years of study. The Operations Management 2+2 BS program, the first approved by MN State for a block credit transfer, recognizes the technical courses as a cohesive set of courses with stated and verified educational outcomes.

### **Operations Management Career Information**

Operations Management (OM) is a professional program that specifically educates graduates to manage, coordinate, and supervise the operations management process in a variety of industries. Throughout the program, students learn the responsibilities of management, general business, leadership, lean, safety, quality, risk, and production inventory management, allowing them to coordinate and manage people, processes, projects, materials, budgets, schedules, and logistics.

Operations managers hold a variety of job titles, such as operations manager, technical sales and marketing, quality assurance specialists, design expert, information management, production management, materials manager, supply chain manager, purchasing, logistics, process engineer, manufacturing engineer, continuous improvement manager, etc. The Operations Management program is offered fully on line, on campus and off campus in the Twin Cities.

### **Operations Management Program Assessment**

The Operations Management (OM) program at MSU Moorhead is accredited by the Association of Technical

Management and Applied Engineering (ATMAE), which establishes standards and criteria for excellence in industrial technology.

Assessment of the operations management program must satisfy two entities. First and foremost, assessment is a requirement of the ATMAE and the OM program must meet or exceed those standards. ATMAE requires a comprehensive assessment plan including program outcomes and student performance outcomes, which are outlined below. In addition, Minnesota State University Moorhead (MSUM) requires that all degree-granting programs have a student outcomes assessment plan. This assessment plan is designed to satisfy both entities.

### **Internship/On the Job Requirement**

Students will be required to fulfill an internship/on the job requirement as part of their graduation requirements. The student will participate in various activities with Career Services to ensure they have a proper resume, cover letter and job search strategy. The student is responsible for finding their own internship/on the job requirement. There are three types of internships/on the job training that qualify: 1) If the student is gainfully employed in an industrial technology job setting, they can work with their manager and take their internship at their current place of employment. The manager, faculty advisor and student will outline the specific objectives of the internship to ensure there is a proper amount of operations management related objectives. 2) The student may attend various job fairs, work with industries interested in operations management interns, and/or search companies of interest and find an internship position. Once the student has interviewed and been offered a position as intern, the University paperwork will coincide with the requirements of the employer. 3) The student may launch a full scale job search in the operations management field and treat their first operations management position as their internship. All types of internships must meet the program and university requirements.

### **Project Management Program Overview**

The MSU Moorhead's Project Management major is designed for individuals who like to lead projects, get things done, and make an impact with their work. Project managers are needed in all industries and across all professions. It's a degree designed to be flexible and allows you take up to 30 credits in your area of interest and transfer in your 2 year AS or AAS degree. It is also a great fit for AA transfers. You have a lot of flexibility with the degree; you can pair it with an area of emphasis, a minor or even a double major. Project management is a particularly great fit for business, marketing, computer science, human resources, and medical professionals. Project managers are equipped to deal with a wide variety of different problems and provide solutions in most professional's fields, making their skillset highly demanded by workforce. The degree was designed to guide students to become effective project managers, equipped with technical skills and leadership skills necessary to deliver successful projects in their area of passion. A project management education coordinates the Project Management Body of Knowledge (PMBOK) areas with a student's area of emphasis, minor, double major, or transfer degree. The degree was built on one fundamental principle—regardless of industry, regardless of discipline or job title, everyone needs to get things done. Students who successfully complete the required project management courses offered in this program are eligible to also earn and have MSUM pay for the Globally Recognized CAPM certification.

### **Project Management Career Information**

Job opportunities in project management include project analyst, risk manager, helpdesk manager, project consultant, project manager, business development, IT project manager, IT director, operations manager, project coordinator, software manager, and non-profit manager.

Project oriented job openings are expected to increase annually by 1.2 million through 2016. This job growth is expected in both private and public industry in a managerial-type setting. The annual median salary of all

entry-level project managers were between \$53,991-\$72,460, with the expected median entry level project manager salary at \$62,019. With additional on the job training and a PMP (Project Management professional) certification, project manager salaries can increase to \$81,364-\$104,801 annually.

Job opportunities in project management include project analyst, risk manager, helpdesk manager, project consultant, project manager, business development, IT project manager, IT director, operations manager, project coordinator, software manager, and non-profit manager.

Want Job security? While national economies will fluctuate in the years ahead—some expanding, others contracting—they will share one constant: a strong demand for project managers. From 2010 to 2020, recent study shows that 15.7 million new roles will be added in seven project-intensive industries. That is a projected growth of US\$6.61 trillion!\* PMI Institute, June 2016

### **Global Supply Chain Management Mission Statement:**

To transform lives by providing rigorous and applied education to our students.

### **Global Supply Chain Management Program Overview**

The major in Global Supply Chain Management provides education for those interested in planning and implementing successful supply chain strategies both domestically and internationally. The degree is intended to create globally minded citizens, who can manage the distribution of goods and services not only domestically, but also across the world. Students who graduate from global supply chain can travel the world or stay local. Supply chain is necessary for both local, national, and global movement of goods and services. Global supply chain managers are in demand in a variety of fields ranging from manufacturing, distribution, business, healthcare, non-profit, and government. A "supply chain" refers to the process a company takes to transform raw material components into a final product that is delivered to customers. It also refers to the process of taking a service (like a help desk) and managing the steps the customer experiences while working with the service team. Typically, supply chain management has five stages: plan, make, source, deliver and return. Every stage of the process involves professional skills critical to success, from marketing and logistics to data management and warehousing.

Students who graduate from this program will find multiple rewarding career opportunities open to them in the areas of logistics, e-commerce, purchasing, manufacturing, and international business.

### **Global Supply Chain Management Career Information**

Global Supply Chain Management, also known as the value chain or logistics network management, consists of a network of suppliers, manufacturers, warehouses, distribution centers, wholesalers and retailers. It also includes a variety of specialized facilitating systems, such as transportation and information systems. The Global Supply Chain Management option develops an understanding of the design, control and operation of supply chains.

### **Careers**

- Strategic partners/vendor manager
- Supply chain manager
- Global sourcing manager
- Senior buyers
- Warehouse manager/buyer
- Director of operations
- Global supply chain analyst



- Analytics QA engineer
- International trade and border specialist

In today's complex global business world, an organization's overall success boils down to the efficiency and effectiveness of its supply chain. Competitive strength relies both on a firm's products and the processes that provide products to customers. Effective supply chain management enhances productivity and performance with the strategic combination of people, systems and technology to successfully compete in the global marketplace.

How can a \$1.3 trillion industry, getting bigger every year, be hidden in plain sight? Easy. The vast U.S. logistics business, which delivers 48 million tons of freight (worth about \$48 billion) daily and already employs roughly 6 million people, operates mostly behind the scenes. "When you order something from, say, Amazon, you know it arrives on your doorstep in two days, but most people don't think about how," observes George Prest, CEO of logistics trade group Material Handling Industry (MHI). He adds that the field gets overlooked by new grads in particular, who think of supply chain work - if they think of it at all - as a "guy driving a forklift in a dusty old factory." (Fortune, 2017)

## **B.S. Degree in Construction Management**

To receive the B.S. Degree in Construction Management, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits). Students must earn a grade of C- or higher in all core courses required for the program.

Upon graduation from an accredited ACCE 4-year program a graduate should be able to:

- The student will create written communications appropriate to the construction discipline.
- The student will create oral presentations appropriate to the construction discipline.
- The student will create a construction project safety plan.
- The student will create construction project cost estimates.
- The student will create construction project schedules.
- The student will analyze professional decisions based on ethical principles.
- The student will analyze construction documents for planning and management of construction processes.
- The student will analyze methods, materials, and equipment used to construct projects.
- The student will apply construction management skills as an effective member of a multi-disciplinary team.
- The student will apply electronic-based technology to manage the construction process.
- The student will apply basic surveying techniques for construction layout and control.
- The student will understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
- The student will understand construction risk management.
- The student will understand construction accounting and cost control.
- The student will understand quality assurance and control.
- The student will understand construction project control processes.
- The student will understand the legal implications of contract, common, and regulatory law to manage a construction project.
- The student will understand the basic principles of sustainable construction.

- The student will understand the basic principles of structural behavior.
- The student will understand the basic principles of mechanical, electrical and plumbing systems.

#### Core Requirements (55 credits)

All majors must earn two credits from CM 469 Internship. Students must earn a grade of C- or higher in all required courses.

CM 200 Construction Surveying (1)  
 CM 200L Construction Surveying Lab (1)  
 CM 205 Professional Growth Seminar I (1)  
 CM 216 Construction Graphics (3)  
 CM 220 Commercial Building Methods and Materials (3)  
 CM 230 Estimating I: Quantity Survey (3)  
 CM 254 Mechanical/Electrical Systems (3)  
 CM 327 Sustainability in the Built Environment (3)  
 CM 335 Estimating II-Pricing and Productivity (3)  
 CM 340 Planning and Scheduling (4)  
 CM 350 Structural Analysis (3)  
 CM 365 Construction Safety (2)  
 CM 370 Construction Documents and Specifications (3)  
 CM 380 Pre-Construction Services (3)  
 CM 425 Equipment Productivity and Analysis (3)  
 CM 434 Construction Cost Analysis (3)  
 CM 445 Contractor Quality Management (3)  
 CM 460 Project Administration (3)  
 CM 469 Internship (2)  
 CM 470 Construction Law (2)  
 CM 492 Capstone Experience (3)

#### Related Requirements (33 credits)

ACCT 230 Principles of Accounting I (3)  
 ACCT 280 Legal Environment of Business (3)  
 COMM 100 Speech Communication (3)  
 ECON 202 Principles of Economics I: Micro (3) **OR**  
 ECON 204 Principles of Economics II: Macro (3)  
 ENGL 101 English Composition I (3)  
 ENGL 201 English Composition II (3) **OR**  
 ENGL 202 English Composition and Literature (3) **OR**  
 ENGL 387 Technical Report Writing (3)  
 MATH 142 Pre-Calculus (5)  
 MGMT 260 Principles of Management (3)

#### Physical Science Elective I (4 credits - must include a lab experience)

CHEM 110/CHEM 110L Fundamentals of Chemistry and Lab (4) **OR**  
 CHEM 150/CHEM 150L General Chemistry I and Lab (4) **OR**  
 GEOS 115/GEOS 115L Physical Geology and Lab (4) **OR**  
 GEOS 117/GEOS 117L Water, Land, and People and Lab (4) **OR**  
 PHYS 160 College Physics I with Lab (4)

Physical Science Elective II (3/4 credits – may or may not include lab experience)

CHEM 102 – Environmental Chemistry (3) **OR**

CHEM 110/CHEM 110L Fundamentals of Chemistry and Lab (4) **OR**

CHEM 150/CHEM 150L General Chemistry I and Lab (4) **OR**

GEOS 115/GEOS 115L Physical Geology and Lab (4) **OR**

GEOS 117/GEOS 117L Water, Land, and People and Lab (4) **OR**

PHYS 160 College Physics I with Lab (4)

## **B.S. Degree in Global Supply Chain Management**

The major in Global Supply Chain Management provides education for those interested in planning and implementing successful supply chain strategies both domestically and internationally. The degree is intended to create globally minded citizens who can manage the distribution of goods and services not only domestically, but also across the world. Students who graduate from this major can travel the world or stay local. Supply chain is necessary for both local, national, and global movement of goods and services.

The Student Learning Outcomes of the major in **Global Supply Chain Management** (GSCM) are to help students:

- **Identify the components of global supply chains** (e.g., sourcing, manufacturing and production, distribution, sales and customer service) and issues related to the management of global supply chains.
- Compare and contrast the strengths and weaknesses, of **different business operating models**.
- **Explain how organizations operate and adapt** to cultural and regional norms, address border issues, and comply with local, regional, and international laws governing the conduct of business.
- Explain **the connections between disciplines** related to GSCM (e.g., Operations, Marketing, Sales, Information Systems, International Business, etc.).
- Identify and explain **current and future career opportunities** within GSCM.

Core Requirements (39 credits)

ACCT 230 Principles of Accounting I (3)

MGMT 260 Principles of Management (3)

MGMT 370 Management Information Systems (3)

MGMT 380 Operations Management (3)

MGMT 419 Supply Chain Management (3)

MKTG 270 Principles of Marketing (3)

OM 380 Methods Improvement (3)

OM 395 Computer Applications for Technologists (3)

OM 470 Purchasing and Sourcing Management (3)

OM 472 Logistics Management and Network Design (3)

OM 485 Production Inventory Management (3)

PMGT 300 Project Management and Scheduling (3)

PMGT 385 Process Leadership (3)

Related Requirements (6 credits)

MATH 234 Probability and Statistics (3)

ECON 202 Microeconomics (3)

Restricted Electives (12 credits)

FINC 340 Financial Management (3) **OR**  
OM 483 Cost Analysis (3)  
MKTG 444 International Marketing (3) **OR**  
PMGT 301 Introduction to CRM (3)  
MGMT 458 International Management (3) **OR**  
PMGT 401 CRM Consulting (3)  
BUS 480 Dragon Consulting (3) **OR**  
OM 469 Internship (3)

## **B.S. Degree in Operations Management**

This degree is intended for technical minds to learn how to lead projects, people or processes in a variety of industries and in a variety of roles. The degree teaches you lean fundamentals, quality management, production management, service flow management, six sigma principles, project management, and the fundamental leadership/supervision. It focuses on the flow of goods and services throughout the company whether it be making products, offering services, managing inventory, and many more. The degree is designed for people who are busy, need accelerated classes, flexible delivery options, and real world and industry based courses. The program is ranked as the #4 Operations Management degree in the nation by College Best Choice.

### **Operations Management General Program Outcomes**

- Apply the fundamentals of leading and managing people, projects and self globally in technical manufacturing and service environments.
- Apply lean, quality, process, analytical, inventory management and technology in an operations management service, production, and other business and nonprofit environments.
- Earn an accredited two year degree in a technical field as defined by ATMAE.
- Utilize the operations management education to advance their education, expand their job opportunities, contribute positively to communities, and enhance their career path.

### **Operations Management Student Learning Outcomes**

- The graduate will be able to apply oral, written, graphic, and listening skills and be able to contribute and facilitate team efforts.
- The graduate will be able to demonstrate appropriate computer skills through the use of word processing, databases, and spreadsheets applications and electronic data searches.
- The graduate will be able to apply mathematical and physical principles to business and industrial applications and implement efficient scientific and technological solutions to industrial problems individually and in a team setting.
- The graduate will be assumed to have gained this competency at their transferring institution by graduating from an accredited institution in an articulated technical oriented program.
- The graduate will be able to demonstrate skills for determining the cost advantage of different processes and performing cost estimates. The student will also understand and be able to document the costs and benefits associated with production concepts such as Just-In-Time and Total Quality Management.
- The graduate will understand the implication of TQM on the local and national economy, methods and procedures for planning, organizing and controlling for quality, statistical methods for quality control, and the application of quality tools and techniques for designing products and services.

- The graduate will understand the varied needs for inventory, technology in different production environments, the effect of inventory on business techniques for scheduling materials, workers, machinery and space, and the Theory of Constraints and its usage for production scheduling.
- The graduate will be able to apply skills of organizing and managing resources to deliver the temporary or one-time endeavor project with a defined scope, time and cost constraints. The graduate will also understand the changing workplace structure and be a positive contributor.
- The graduate will be able to apply appropriate management skills, demonstrate ethical actions and conduct, be aware of the personal value for involvement and contribution to the community and knowledge of industry expectations.
- The graduate will exhibit an understanding and acceptance of human concern for ethical treatment of all persons. Additionally, graduates will have a realistic understanding of the internationalization of business and industry.

#### Core Requirements (33 credits)

**Students in this major will transfer in 30 technical credits from a technical area and complete the following core courses.**

ENGL 387 Technical Report Writing (3)  
 MGMT 260 Principles of Management (3) *\*was MGMT 360*  
 OM 380 Methods Improvement (3)  
 OM 393 Occupational Safety and Health (3)  
 OM 395 Computer Applications for Technologists (3)  
 OM 469 Internship (3)  
 OM 482 Quality Management (3)  
 OM 483 Cost Analysis (3)  
 OM 485 Production Inventory Management (3)  
 PMGT 300 Project Management and Scheduling (3)  
 PMGT 385 Process Leadership (3)

#### Related Requirements (12 credits)

Students must complete the requirements listed below:

ACCT 230 Principles of Accounting I (3)  
 ECON 202 Principles of Economics I: Micro (3)  
 MATH 127 College Algebra (3)  
 MATH 234 Introduction to Probability and Statistics (3)

### **B.S. Degree in Project Management**

This major is designed for individuals who like to lead projects, get things done, and make an impact with their work. Project managers are needed in all industries and across all professions. It is a degree designed to be flexible and allows you to take up to 30 credits in your area of interest and transfer in your 2-year AS or AAS degree. It is also a great fit for AA transfers. The degree can be paired with an area of emphasis, a minor or even a double major. Project management is a particularly great fit for business, marketing, computer science, human resources, and medical professionals. Project managers are equipped to deal with a wide variety of different problems and provide solutions in most professional's fields, making their skill set highly demanded by workforce. The degree is designed to guide students to become effective project managers, equipped with technical skills and leadership skills necessary to deliver successful projects in their area of passion. A project management education coordinates the Project Management Body of Knowledge (PMBOK) areas with a student's area of emphasis, minor, double major, or transfer degree. The degree was built on one

fundamental principle - regardless of industry, regardless of discipline or job title, everyone needs to get things done. Students who successfully complete the required project management courses offered in this program are eligible to also earn and have MSUM pay for the globally recognized CAPM certification.

## **Project Management General Learning Outcomes**

### Technical Expertise

- Understand the fundamentals of the PMBOK knowledge areas, process groups and tools in projects to meet the competitive needs of global, regional and local businesses.
- Examine and define process improvement theories and applications in a project context.

### Behavior Expertise

- Assess and create positive personal and ethical leadership, communication and team management skills, and apply to stakeholder engagement and project teams globally.

### Strategic Awareness

- Assess the strategic, business, cultural and operational drivers required to inform decisions and deliver sustained competitive advantage in the project management context.
- Apply the fundamentals of the project management interdisciplinary degree to enhance job opportunities and career advancement.

## **Project Management Student Learning Outcomes**

### Technical Expertise

- Create project management plans using appropriate techniques and tools per the PMBOK Guide.
- Examine the five project development process groups and knowledge areas within the PMBOK Guide.
- Prioritize project needs with regard to scope, resources, cost, schedules, procurement, and risks.
- Identify tools, principles, and techniques of continuous process improvement.
- Create a proactive risk management and quality plan and develop contingency plans.

### Behavioral Behavior

- Examine the fundamentals of effective communication, team management, and leadership skills with a project team and stakeholders.
- Assess ethical and personal leadership style and apply to the needs of the project team and stakeholders.

### Strategic Behavior

- Discover how project managers align organizational strategy, culture and operational drivers to inform decisions to satisfy project requirements.
- Apply fundamental business, lean and quality processes to the multidisciplinary, industry and global project environment.
- Explain management and integration of organizational programs and project portfolios.

### Core Requirements (45 credits)

ACCT 230 Principles of Accounting I (3)  
ENGL 387 Technical Report Writing (3)  
FINC 340 Financial Management (3)  
MGMT 260 Principles of Management (3)  
MGMT 370 Management Information Systems (3)  
MGMT 456 Project Management in Business (3)  
MKTG 270 Principles of Marketing (3)  
OM 380 Methods Improvements (3)  
OM 395 Computer Applications for Technologists (3)  
OM 482 Quality Management (3)  
OM 483 Cost Analysis (3)  
PMGT 300 Project Management and Scheduling (3)  
PMGT 385 Process Leadership (3)  
PMGT 400 Advanced Project Management, Risk and Liability (3)  
PMGT 492 Project Management Capstone (3)

### Related Requirements (9 credits)

MATH 127 College Algebra (3)  
MATH 234 Probability and Statistics (3)  
ECON 202 Microeconomics (3)

### **Minor in Construction Management – 22 credits**

In addition to the listed courses, students must earn at least six credits in Construction Management electives. Students must choose their electives in consultation with their faculty advisor.

CM 220 Commercial Building Methods and Materials (3)  
CM 230 Estimating I: Quantity Survey (3)  
CM 340 Planning and Scheduling (4)  
CM 460 Project Administration (3)  
ENG 200 Surveying (3)

### **Minor in Global Supply Chain Management – 21 credits**

The interdisciplinary minor (collaboration between Professional Management Dept. and Paseka School of Business) in Global Supply Chain Management program provides students with an understanding of the important role of supply chain management in domestic and international business. It is a good choice for project management, business, and IT majors.

The Student Learning Outcomes of the minor in **Global Supply Chain Management** (GSCM) are to help students:

- **become familiar with components of global supply chains** (e.g., sourcing, manufacturing and production, distribution, sales and customer service) and issues related to the management of global supply chains.
- understand the similarities and differences, as well as the strengths and weaknesses, of **different business operating models**.
- **gain insights into how organizations operate and adapt** to cultural and regional norms, address border issues, and comply with local, regional, and international laws governing the conduct of business.

- understand **the connections between disciplines** related to GSCM (e.g., Operations, Marketing, Sales, Information Systems, International Business).
- develop an **in-depth knowledge of current and future career opportunities** within GSCM

MATH 234 Introduction to Probability and Statistics (3)

MGMT 260 Principles of Management (3)

MGMT 380 Operations Management (3)

MGMT 419 Supply Chain Management (3)

OM 470 Purchasing and Sourcing Management (3)

OM 472 Logistics Management and Network Design (3)

OM 485 Production Inventory Management (3)

### **Minor in Operations Management – 17 credits**

The Operations Management minor will provide students the opportunity to enhance their major with knowledge in operational design and control, including forecasting, planning and quality assurance. The Operations Management minor can position graduates for positions in areas such as logistics, quality assurance, process improvement, inventory, project management, and more. The minor is a cross-disciplinary and fits with majors from business, project management, computer science, management, marketing, accounting, finance, and many more.

#### **Production and Inventory Management**

The graduate will understand the varied needs for inventory, technology and human resources in different production environments, the effect of inventory on business performance, different techniques for scheduling materials, workers, machinery, and space, and the Theory of Constraints and its usage for production scheduling.

#### **Total Quality Management**

The graduate will understand the implication of TQM on the local and national economy, methods and procedures for planning, organizing and controlling for quality, statistical methods for quality control, and the application of quality tools and techniques for designing products and services.

#### **Economics and Cost Estimating**

The graduate will be able to demonstrate skills for determining the cost advantage of different processes, and performing cost estimates. The student will also understand and be able to document the costs and benefits associated with production concepts such as Just-In-Time and Total Quality Management.

OM 380 Methods Improvement (3)

OM 393 Occupational Safety and Health (3)

OM 482 Quality Management (3)

OM 483 Cost Analysis (3)

OM 485 Production Inventory Management (3)

Must choose one elective course for 3 credits:

MGMT 260 Principles of Management (3)

MGMT 370 Management Information Systems (3)

MGMT 380 Operations Management (3)

PMGT 300 Project Management and Scheduling (3)



PMGT 385 Process Leadership (3)  
OM 395 Computer Applications for Technologists (3)

### **Minor in Project Management – 22 credits**

A minor in project management compliments just about any degree and the students learn valuable skills in meeting deadlines, managing stakeholders, understanding risk, and creating business cases and scope documents. Gain a competitive edge over someone in your discipline who has a degree and show your employer you can create results. The student will be eligible to earn the globally recognized PMI CAPM certification.

PMGT 300 Project Management and Scheduling (3)  
PMGT 385 Process Leadership (3)  
MGMT 260 Principles of Management (3)  
OM 395 Computer Applications for Technologists (4)  
PMGT 400 Advanced Project Management, Risk and Liability (3)  
MGMT 456 Project Management in Business (3)  
PMGT 492 Project Management Capstone (3)

### **Minor in Professional Selling – 18 credits**

The purpose of the Professional Selling Minor is to foster a productive and collaborative learning environment to develop knowledge and skills in the management of customer relationships, equip students with the skills, ethics, and attitudes necessary to be an effective customer relationship professional in a variety of arenas, and to provide opportunities for students to exercise and develop the knowledge and skills necessary to function effectively and efficiently through their ability to apply customer relationship skills.

Admission to minor: Must have 30 earned credits - the level of the coursework is appropriate for sophomores and above.

#### **Student Learning Outcomes**

- Apply customer relationship management principles to the processes, monitoring, and management of the customer life cycle.
- Identify and apply sales processes that lead to effective and successful customer engagement as well as value to the business.
- Demonstrate how to communicate effectively in diverse contexts and audiences through various mediums.
- Compare and contrast consumer buying behavior across multiple contexts.
- Develop and communicate situational specific customer engagement strategies and recommendations.
- Utilize and apply the use of software tools to help manage, monitor, and analyze customer behaviors, sales performance, and customer engagement.
- Demonstrate the ability to be an active listener, identify customer wants and needs, develop relationships, and manage conflict situations.

COMM 201 Interpersonal Communication (3)  
MKTG 270 Principles of Marketing (3) **OR**  
ENTR 232 Entrepreneurial Marketing (3)  
OM 201 Introduction to Professional Selling (1)

OM 401 Professional Selling Practicum (2)

PMGT 301 Introduction to CRM (3)

Must take 6 credits of electives:

COMM 285 Intercultural Communication (3)

COMM 301 Business and Professional Communication (3)

COMM 352 Social Media Campaigns (3)

COMM 366 Personal Selling (3) **OR**

MKTG 330 Personal Selling (3)

OM 395 Computer Applications for Technologists (3)

PMGT 401 CRM Consulting (3)

### **Certificate in Customer Relationship Management – 9 credits**

This certificate will provide students with a broad range of perspectives and background related to a career in CRM software consulting, CRM strategy consulting, CRM project management, or managing internal CRM initiatives in an organization. The certificate consists of three courses: Project Management, CRM Consulting, and Introduction to CRM Software.

Admission to Certificate requires Junior Standing.

#### **Student Learning Outcomes**

- Apply a project management methodology: define, plan, execute and close.
- Assess project contributions to business strategy, purpose and plans.
- Build the project team selection processes.
- Create a preliminary business case for project.
- Define and analyze project constraints and assumptions.
- Define the fundamentals of a basic PM methodology.
- Develop and assess a project plan in software that has baseline, resources, constraints, and budgets, including WBS and Gantt charts.
- Develop plans to manage various stakeholders.
- Explain the role of a PM in different industries.
- Name the different career professions for PM's.
- Recall basic project terminology.
- Identify and explain the core, strategic areas of customer relationship management.
- Demonstrate how to leverage CRM software tools to manage and analyze identified CRM strategies within a business or organization.
- Explain how different types of customers impact an overall CRM strategy.
- Utilize and demonstrate their ability to use the Sales, Marketing, and Customer Care modules within Microsoft Dynamics CRM.
- Be prepared to take the Microsoft Dynamics CRM Application Exam if they choose.
- Identify traits of an effective consultant
- Identify and articulate customer and client needs
- Identify, plan, and communicate solutions based upon customer and client needs
- Define and explain the customer life-cycle
- Demonstrate understanding of how customer engagement factors into the consulting process
- Identify the traits of an engaged customer
- Plan and execute upon customer engagement strategies
- Synthesize real-life case studies of customer requirements and identify potential solutions.

Successful completion of the following courses:

PMGT 300 Project Management and Scheduling (3)  
PMGT 401 Customer Relationship Management Consulting (3)  
PMGT 301 Introduction to CRM (3)

### **Certificate in Lean - Quality Management – 9 credits**

The Lean Certificate will provide students the opportunity to enhance their knowledge in the following aspects of lean methodology; 1- Methods Improvement 2- Quality Issues 3- Process Leadership. This certificate can position professionals for positions in areas such as quality assurance, process improvement, project management, and more. The certificate is cross-disciplinary and fits with majors from business, project management, computer science, management, marketing, accounting, finance, and many more. This lean certificate is intended for NON operations management majors.

OM 380 Methods Improvement (3)  
OM 482 Quality Management (3)  
PMGT 385 Process Leadership (3)

### **Certificate in Project Management – 9 credits**

Businesses, non-profit, education, and organizations are all recognizing the value of project management beyond its traditional use in information technology. This certificate is designed for business and non-business employees who would like to add the project management skill to their respective discipline. The certificate will focus on the methodology, software, stakeholder management, risk, liability, project leadership, and change management—all vital parts of being a successful project manager in your area of expertise.

Regardless of industry, institution or degree specialization, Project Management is a core competency that will teach employees how to manage projects within their discipline with a solid methodology to ensure their projects are on time, within budget, and of high quality. The series of courses in the certificate (if employee is interested) will prepare them to take CAPM exam from PMI.org.

This certificate is intended for non-project management majors and pairs well with business, computer science, and non-business degrees. All industries and roles need employees to be able to manage products.

#### **Student Learning Outcomes**

- Apply a fundamental project management methodology.
- Construct a project plan in Microsoft Project.
- Analyze the risk, liability and cost for projects.
- Explain the fundamentals of people leadership on a project.
- Prepare for the CAPM or PMI certification.

PMGT 300 Introduction to Project Management and Scheduling (3)  
PMGT 400 Risk, Liability and Contracts (3) **OR**  
PMGT 385 Process Leadership (3)  
PMGT 492 Project Management Capstone (3)

## **Psychology**

### **Psychology Department**

**Bridges Hall 360, (218) 477-2802**

**Chair:** Christine Malone

**Faculty:** Rochelle Bergstrom, Magdalene Chalikia, Mary Dosch, Sarah Edwards, Jared Ladbury, Olivia Melroe, Elizabeth Nawrot, Margaret Potter, Lisa Stewart

The Psychology Department offers an undergraduate major and minor in psychology. An important aspect of the program is the science/research orientation built into the curriculum. Students may specialize in areas emphasizing preparation for graduate school or for work in the profession at the bachelor's degree level. MATH 127 College Algebra or an equivalent for LASC Goal 4 is recommended prior to taking PSY 230 Statistics for the Behavioral Sciences.

### **B.A. Degree in Psychology**

To receive the B.A. Degree in Psychology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Students will demonstrate fundamental knowledge and comprehension of the major concepts, theoretical perspectives, historical trends, empirical findings, and applications in psychology to discuss how psychological principles apply to behavioral problems.
- Students will learn skills necessary to interpret behavior, study research, apply research design principles, and design research plans.
- Students will develop an awareness of ethically and socially responsible behaviors for professional and personal settings in a landscape that involves increasing diversity.
- Students will demonstrate competence in writing and in oral and interpersonal communication skills.
- Students will apply psychology specific content and skills to enhance professional development.

PSY 113 General Psychology (3)

PSY 202 Developmental Psychology (3)

PSY 230 Statistics for the Behavioral Sciences (4)

PSY 261 Personality (3)

PSY 330 Experimental Methods (3) \*Upper Level Writing Intensive Course required for major \*pre-req PSY 230

PSY 463 Abnormal Psychology (3)

PSY 492 Seminar in Psychology (3) \*pre-req PSY 330

PSY 230, PSY 330 and PSY 492 comprise a course sequence and may not be taken concurrently.

Students must take at least 18 elective credits in Psychology courses, 9 of which must be at the 300 level or above.

Total Credits for Major: 120

### **Minor in Psychology – 25 credits**

With departmental approval, students may substitute MATH 234 or SOC 350 for PSY 230.

PSY 230 Statistics for the Behavioral Sciences (4)

PSY 113 General Psychology (3)  
PSY 202 Developmental Psychology (3)  
PSY 261 Personality (3)

Twelve elective credits in Psychology are required. At least six of the 12 must be at the 300 or 400 level.  
Total Credits: 24-25

## **School of Business**

### **Paseka School of Business**

**Center for Business 207A, (218) 477-4646**

**Co-Chairs:** Vinod Lall and Mary Stone

**Faculty:** HyunSang An, Ben Clapp, Lakshmi Dinesh, Mohamed Elbannon, Sheri Erickson, Peter Geib, Lori Johnson, Wooyang Kim, Ruth Lumb, Ralf Mehnert-Meland, Kim Mollberg, Eduardo Pablo, Jane Pettinger, Gokce Serdar, Leonard Sliwoski, Siwei Zhu

### **Areas of Study**

The Paseka School of Business is accredited by AACSB. Majors in Accounting, Finance, Business Analytics and Business Administration are offered. Students majoring in Business Administration can choose from emphasis areas in international business, management, and marketing. The School of Business offers certificate programs in Business Analytics, Doing Business in China, Entrepreneurship, Banking, Corporate Finance, Investments, and Human Resources. Non-business students can choose minors in Entrepreneurship, Business Administration, Management, and Marketing. The School of Business also offers a Master's of Science in Accounting and Finance, a general MBA, and an MBA with healthcare emphasis. All courses in the MBA curriculum are available online. These courses will have optional live interactive sessions. Students who are unable to attend the live sessions will have the opportunity to review the session recordings.

### **SCHOOL OF BUSINESS ADMISSION AND COURSE ENROLLMENT POLICY**

Any MSUM student who has completed 40 semester credits and who also meets the specific course prerequisites may register for the following courses without any special permission: ACCT 280, FINC 340, MGMT 260, MKTG 270. Students seeking to take any courses beyond these four courses must be either admitted to the School of Business or receive a “program override” from the School of Business Academic Advisor.

### **Obtaining Admission to the School of Business**

Admission to the School of Business enables students to register for other upper-level School of Business courses and to pursue any School of Business major.

Students who officially declare any School of Business major must apply for admission. A previously admitted student returning to complete a degree in the School of Business after a year or more of taking no courses must also formally reapply for admission and will be placed into an existing program and follow the curriculum in effect as of the returning date. The student-initiated application must be approved by a co-chair of the School of Business. The applicant must meet the following requirements at the time of application.

- An overall GPA of at least 2.50 (includes all MSUM courses and courses accepted in transfer).
- Completion of, or current enrollment in, the 60<sup>th</sup> semester credit.
- Must have signed the School of Business Integrity Oath Acknowledgement.
- Completion of, or current enrollment in, the following MSUM courses or equivalent courses:  
ACCT 230 & ACCT 231  
CSIS 104

ECON 202 & ECON 204  
ENGL 101  
MATH 227 or MATH 229 & MATH 234  
PSY 113 or SOC 110  
COMM 100

### **Enrollment in Upper-Level School of Business Courses by Non-Business Majors with Business Course Requirements and Non-Business Majors Seeking Minors**

Programs outside the School of Business often identify upper-level accounting or business courses as required or elective courses within their own programs. In addition, students in other programs may decide to declare a minor in the School of Business. In both cases, students may need to take upper-level accounting or business courses beyond ACCT 280, FINC 340, MGMT 260, and/or MKTG 270. Such students need to obtain a “program override” from the School of Business Academic Advisor. Students are also expected to have at least junior standing and meet course prerequisites when taking each course. A maximum of 21 upper-level School of Business credits may be taken without applying for admission to the School of Business.

### **Enrollment in Upper-Level School of Business Courses by Non-Degree Seeking Undergraduate Degree Holders.**

A non-degree seeking student who has an undergraduate degree may take any course in the School of Business provided that their undergraduate GPA is at least 2.5 (includes all courses taken or courses accepted in transfer) and that they have satisfied all the prerequisites for that course as shown in the course catalog. When attempting to enroll in courses, the registration system will check for course prerequisite. If a student is found to lack required prerequisites but believe that they have in fact satisfied the requirement, they can seek a program override from the department chair that will allow them to enroll. In addition, after taking at least three courses under this condition, a minimum overall GPA of 2.5 for all such courses must be maintained.

### **Course Prerequisites and Overrides**

When students cannot register because the system indicates that they have not satisfied course prerequisites and/or minimum GPA requirements, only department chairs and the School of Business Academic and Transfer Advisor are authorized to do overrides. As students are responsible for meeting the requirements for course prerequisites prior to attempting to enroll in a course, faculty are advised to inform students of their responsibilities and to only refer students to the co-chairs or the Academic and Transfer Advisor if one of the following two conditions are met:

- The student appears to have satisfied the prerequisite using a transferred course according to their DARS but the system is not recognizing the course as satisfying the prerequisite requirement when attempting to register.
- The student is graduating in the present semester and not being able to enroll in the course due to not having completed the prerequisites will delay their graduation.

MGMT 498 has a minimum GPA requirement as a prerequisite. An override for this requirement will be granted by the Academic Advisor upon receiving acknowledgement from the student in writing that they have been informed of the minimum GPA requirement necessary for graduation. This written acknowledgement will be placed in the faculty advisor’s student folder.

### **Graduation Policy for School of Business**

All School of Business majors must have a 2.50 overall GPA to graduate. This GPA is based solely on courses taken at MSUM. All School of Business minors must have a 2.00 GPA in courses comprising the minor.

## **Baccalaureate Degree Programs**

Majors in Accounting, Business Administration, Business Analytics and Finance are offered. The following curricula are subject to change. See Program Worksheets for current degree requirements. At least 60 non-business semester credits are required. At least half of the minimum credits required for degree completion must be earned from departments other than Economics and The School of Business.

Substitution and waivers of courses required for the B.S. degree in Accounting, Business Administration, Business Analytics and Finance must be approved in writing by the chair of the School of Business. At least half of the course requirements for the major or minor must be earned on this campus.

Business majors require:

- completion of related requirements;
- completion of core requirements;
- completion of major requirements and restricted electives; and
- at least 60 non-business credits that may include 9 credits of economics.

Graduate Program information can be found at <http://www.mnstate.edu/graduate>.

## **B.S. Degree in Accounting**

To receive the B.S. Degree in Accounting, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits).

Student Learning Outcomes

- Exhibit basic knowledge of business principles and processes.
- Write in a clear and professional manner.
- Prepare and deliver an effective business presentation.
- Identify and analyze ethical issues in a professional context.
- Demonstrate basic understanding of business from a global perspective.

Business Policy and Strategy should be taken after all core requirements are completed.

### Core Requirements (27 credits)

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)  
ACCT 280 Legal Environment of Business (3)  
MGMT 498 Strategic Management (3)  
FINC 340 Financial Management (3)  
MGMT 260 Principles of Management (3)  
MGMT 371 Introduction to Business Analytics (3)  
MGMT 380 Operations Management (3)  
MKTG 270 Principles of Marketing (3)

### Program Requirements (27 credits)

ACCT 306 Contracts and Business Entities (3)  
ACCT 330 Intermediate Accounting I (3)  
ACCT 331 Intermediate Accounting II (3)  
ACCT 332 Intermediate III (3)

ACCT 350 Cost Accounting (3)  
ACCT 375 Accounting Systems (3)  
ACCT 430 Advanced Accounting (3)  
ACCT 441 Tax Accounting I (3)  
ACCT 460 Audit I (3)

Students must complete an experiential learning component in order to graduate. Examples include

- Internships
- Experiential learning program
- Executive mentorship
- Job shadowing
- Cooperatives
- Study abroad
- Faculty/student research projects
- Participation in academic competitions
- Dragon Fund
- Service learning
- Student academic conference presentations
- Significant class projects for external entities

#### Related Requirements (33 credits)

In addition to the courses listed below, students must take one Global course and one Human Diversity course. This requirement can be met by taking one course in LASC 7 and one course in LASC 8. CMST 301 OR ENGL 387 is the writing-intensive course for this major. Students may substitute CSIS 103 and CSIS 104A for CSIS 104.

COMM 100 Speech Communication (3)  
CSIS 104 Spreadsheet and Database Applications (3)  
ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
MATH 229 Topics in Calculus (3) **or**  
MATH 227 Survey of Differential Calculus with Algebra (4)  
MATH 234 Introduction to Probability and Statistics (3)  
ENGL 387 Technical Report Writing (3) **or**  
COMM 301 Business and Professional Communication (3)  
PHIL 312 Business Ethics (3)  
PSY 113 General Psychology (3) **or**  
SOC 110 Introduction to Sociology (3)

#### Restricted Electives

These courses are available as electives only and are not required as a part of the program.

ACCT 407 Commercial Transactions, Property and Special Topics (3)  
ACCT 432 Advanced Accounting II (3)  
ACCT 443 Tax Accounting II (3)  
ACCT 446 Estate, Gift and Trust Taxation (3)  
ACCT 461 Audit II (3)  
ACCT 469 Internship (1-12)



### **Minor Accounting: Business – 15 credits**

ACCT 306 Contracts and Business Entities (3)  
ACCT 330 Intermediate Accounting I (3)  
ACCT 331 Intermediate Accounting II (3)  
ACCT 441 Tax Accounting I (3)

Students must take three credits from the following list. Courses which satisfy major requirements cannot be used to satisfy minor requirements.

ACCT 321 Employment Law (3)  
ACCT 332 Intermediate Accounting III (3)  
ACCT 350 Cost Accounting (3)  
ACCT 375 Accounting Systems (3)  
ACCT 407 Commercial Transaction (3)  
ACCT 430 Advanced Accounting I (3)  
ACCT 432 Advanced Accounting II (3)  
ACCT 443 Tax Accounting II (3)  
ACCT 446 Est/Gift Trust Tax (3)  
ACCT 460 Audit I (3)  
ACCT 461 Audit II (3)  
ACCT 469 Internship (1-12)

### **Minor Accounting: Non-Business – 24 credits**

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)  
ACCT 280 Legal Environment of Business (3)  
ACCT 306 Contracts and Business Entities (3)  
ACCT 330 Intermediate Accounting I (3)  
ACCT 331 Intermediate Accounting II (3)  
ACCT 441 Tax Accounting I (3)

Student must take three credits from the following list:

ACCT 321 Employment Law (3)  
ACCT 332 Intermediate Accounting II (3)  
ACCT 350 Cost Accounting (3)  
ACCT 375 Accounting Systems (3)  
ACCT 407 Commercial Transaction (3)  
ACCT 430 Advanced Accounting I (3)  
ACCT 432 Advanced Accounting II (3)  
ACCT 443 Tax Accounting II (3)  
ACCT 446 Est/Gift Trust Tax (3)  
ACCT 460 Audit I (3)  
ACCT 461 Audit II (3)  
ACCT 469 Internship (1-12)

## **B.S. Degree in Business Administration**

To receive the B.S. Degree in Business Administration, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Exhibit basic knowledge of business principles and processes.
- Write in a clear and professional manner.
- Prepare and deliver an effective business presentation.
- Identify and analyze ethical issues in a professional context.
- Demonstrate basic understanding of business from a global perspective.

### **Core Requirements (27 credits)**

Business Policy and Strategy should be taken after all core requirements are complete.

ACCT 230 Principles of Accounting I (3)

ACCT 231 Principles of Accounting II (3)

ACCT 280 Legal Environment of Business (3)

MGMT 498 Strategic Management (3)

FINC 340 Financial Management (3)

MGMT 260 Principles of Management (3)

MGMT 371 Introduction to Business Analytics (3)

MGMT 380 Operations Management (3)

MKTG 270 Principles of Marketing (3)

### **Program Requirements (15 credits)**

Students must choose one MGMT, one FINC, and one MKTG course from the list below. In addition, students must choose one quantitative course (Select from ECON 370, MGMT 419, MKTG 419, MKTG 451 or MGMT 480) and also must take one international course (Select from ECON 300, ECON 425, FINC 445, MGMT 458 or MKTG 444.)

FINC 325 Financial Institutions and Markets (3) **or**

FINC 360 Principles of Investment (3)

MGMT 433 Predictive Analytics (3) **or**

MGMT 451 Organizational Behavior (3) **or**

MGMT 465 Entrepreneurship (3)

MKTG 311 Marketing Management (3) **or**

MKTG 421 Consumer Behavior (3)

Students must complete an experiential learning component in order to graduate. Examples include:

- Internship
- Experiential learning program
- Executive mentorship
- Job shadowing
- Cooperatives
- Study abroad
- Faculty/student research projects
- Participation in academic competitions
- Dragon Fund

- Service learning
- Student academic conference presentations
- Significant class projects for external entities

### Related Requirements (33 credits)

In addition to the courses listed below, students must take one Global Course and one Human Diversity course. This requirement can be met by taking one course in LASC 7 and one course in LASC 8. ENGL 387 OR COMM 301 is the writing-intensive course for this major. Students may substitute CSIS 103 and CSIS 104A for CSIS 104.

COMM 100 Speech Communication (3)  
 CSIS 104 Spreadsheet and Database Applications (3)  
 ECON 202 Principles of Economics I: Micro (3)  
 ECON 204 Principles of Economics II: Macro (3)  
 MATH 229 Topics in Calculus (3) **or**  
 MATH 227 Survey of Differential Calculus with Algebra (4)  
 MATH 234 Introduction to Probability and Statistics (3)  
 PHIL 312 Business Ethics (3)  
 PSY 113 General Psychology (3) **or**  
 SOC 110 Introduction to Sociology (3)  
 ENGL 387 Technical Report Writing (3) **or**  
 COMM 301 Business and Professional Communication (3)

### Restricted Electives (9 credits)

Students must take nine credits numbered 300 or above from at least two of the following areas: Accounting, Business, Finance, Economics, Management, and Marketing. Students may use any combination of three credits of the following courses to count as one restricted business elective: Internship (469), Small Business Consulting (406) or Independent Study (497).

### **Management Emphasis**

#### Program Requirements (18 credits)

Students must take both MGMT courses listed, and one FINC and one MKTG course from the list below. In addition, students must choose one quantitative course (Select from MGMT 419 or MGMT 480) and also must take one international course (MGMT 458).

FINC 325 Financial Institutions and Markets (3) **or**  
 FINC 360 Principles of Investment (3)  
 MGMT 433 Predictive Analytics (3)  
 MGMT 451 Organizational Behavior (3) **or**  
 MGMT 465 Entrepreneurship (3)  
 MKTG 311 Marketing Management (3) **or**  
 MKTG 421 Consumer Behavior (3)

#### Restricted Electives (6 credits)

Students must choose one course (3-credits) from the following list of MGMT electives and one 3 credit business elective course at the 300 or 400 level that is not MGMT. MGMT 419 or MGMT 480 may not be used if used for quantitative course.

MGMT 315 Government and Business (3)  
MGMT 405 Small Business Management (3)  
MGMT 415 Industrial Organization and Public Policy (3)  
MGMT 416 Labor Economics (3)  
MGMT 419 Supply Chain Management (3)  
MGMT 440 Human Resource Management (3)  
MGMT 442 Compensation and Benefits (3)  
MGMT 456 Project Management in Business (3)  
MGMT 465 Entrepreneurship (3)  
MGMT 469 Internship (1-12)  
MGMT 480 Prescriptive Analytics (3)  
MGMT 497 Independent Study (1-3)

### **Marketing Emphasis**

#### **Program Requirements (18 credits)**

Students must take both MKTG courses listed and choose one FINC and one MGMT course from the list below. In addition, students must choose one quantitative course; select from (MKTG 419 or MKTG 451) and also must take one international course (MKTG 444).

FINC 325 Financial Institutions and Markets (3) **or**  
FINC 360 Principles of Investment (3)  
MGMT 433 Predictive Analytics (3) **or**  
MGMT 451 Organizational Behavior (3) **or**  
MGMT 465 Entrepreneurship (3)  
MKTG 311 Marketing Management (3)  
MKTG 421 Consumer Behavior (3)

#### **Restricted Electives (3 credits)**

Students must select one course from the list below. Students may not use more than three credits from MKTG 469 and MKTG 497 to satisfy this section. Students must select one business elective that is not a MKTG course at the 300 or 400 level. Students may not use MKTG 419 or MKTG 451 if used as the quantitative course nor MKTG 433 or MKTG 465 if used for the Management requirement.

MKTG 317 Services Marketing (3)  
MKTG 330 Personal Selling (3)  
MKTG 335 Retail Management (3)  
MKTG 419 Supply Chain Management (3)  
MKTG 423 Marketing Communications (3)  
MKTG 451 Marketing Research I (3)  
MKTG 452 Marketing Research II (3)  
MKTG 465 Entrepreneurship (3)  
MKTG 469 Internship (1-12)  
MKTG 497 Independent Study (1-3)

## **International Business Emphasis**

### **Program Requirements (18 credits)**

Students must choose one FINC, one MGMT, and one MKTG course from the list below. Students must complete the International courses MGMT 458 and MKTG 444 and select from either ECON 425 or FINC 445.

FINC 325 Financial Institutions and Markets (3) **or**

FINC 360 Principles of Investment (3)

MGMT 433 Predictive Analytics (3) **or**

MGMT 451 Organizational Behavior (3) **or**

MGMT 465 Entrepreneurship (3)

MKTG 311 Marketing Management (3) **or**

MKTG 421 Consumer Behavior (3)

MGMT 458 International Management (3)

MKTG 444 International Marketing (3)

ECON 425 International Trade and Finance (3) **or**

FINC 445 International Financial Management (3)

(2 years) All students must take two years of a second spoken language. All or part of this requirement may be waived due to demonstrated competency.

### **Restricted Electives (6 credits)**

Students must take two courses totaling six credits from the following list, at least one must be numbered 300 or above. Continent/country specific courses will be allowed subject to advisor and chair approval. ECON 425 or FINC 445 cannot be used if already used for quantitative course.

ACCT 469 Internship (1-12) **or**

BUS 469 Internship (1-12) **or**

FINC 469 Internship (1-12) **or**

MGMT 469 Internship (1-12) **or**

MKTG 469 Internship (1-12)

ANTH 248 Ideas of Culture (3)

ECON 425 International Trade and Finance (3) **or**

FINC 445 International Financial Management (3)

INTL 101 Introduction to Global Issues (3)

COMM 324 International Communications (3)

POL 160 International Relations (3)

POL 360 American Foreign Policy (3)

## **B.S. Degree in Business Analytics**

The Business Analytics major will prepare students in the areas of data analysis and optimization to make data-driven or fact-based business decisions. Students will develop skills in the three broad categories of business analytics techniques – descriptive analytics, predictive analytics and prescriptive analytics. To receive the B.S. Degree in Business Analytics, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits).

Student must apply for Admission to the School of Business to enroll in all upper-level (300 or above) School of Business courses except ACCT 280, FINC 340, MGMT 260 and MKTG 270, which require completion of 40 semester hours to enroll. To be admitted, you must meet the following requirements and complete the Application for Admission:

- Student must have an overall GPA of 2.50, which includes all MSUM courses accepted in transfer.
- Student must have completed, or be currently enrolled with 60 total credits.
- Student must sign the School of Business Integrity Oath Acknowledgment.
- Student must have completed, or currently be enrolled in the MSUM courses (or equivalent courses accepted in transfer):

ACCT 230 & ACCT 231  
CSIS 104  
ECON 202 & ECON 204  
ENGL 101  
COMM 100  
MATH 227 or MATH 229 & MATH 234  
PSY 113 or SOC 110

#### Student Learning Outcomes

- Use statistical data analysis techniques for business decision making.
- Use data mining techniques to solve business problems.
- Use cutting edge techniques to develop optimal business solutions.
- Demonstrate proficiency in several business analytics techniques.
- Use business analytics techniques to develop business analytics solutions.

#### Core Requirements (27 credits)

ACCT 230 Principles of Accounting I (3)  
ACCT 231 Principles of Accounting II (3)  
ACCT 280 Legal Environment of Business (3)  
FINC 340 Financial Management (3)  
MKTG 270 Principles of Marketing (3)  
MGMT 260 Principles of Management (3)  
MGMT 371 Introduction to Business Analytics (3)  
MGMT 380 Operations Management (3)  
MGMT 498 Strategic Management (3) *\*was BUS 498*

#### Program Requirements (18 credits)

MATH 210 Concepts from Discrete Mathematics (3)  
CSIS 304 Databases (3)  
MGMT 433 Predictive Analytics (3)  
CSIS 446 Intelligent and Predictive Systems (3)  
MGMT 480 Prescriptive Analytics (3)  
MGMT 492 Business Analytics Capstone (3)

#### Related Requirements

In addition to the courses listed below, students must take one Global Course and one Human Diversity course. This requirement can be met by taking one course in LASC 7 and one course in LASC 8. COMM 301 OR

ENGL 387 is the writing-intensive course for this major. Students may substitute CSIS 103 and CSIS 104A for CSIS 104.

COMM 100 Speech Communication (3)  
CSIS 104 Spreadsheet and Database Applications (3)  
CSIS 152 Introduction to Computers and Programming I-a (3)  
ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
MATH 229 Topics in Calculus (3) **or**  
MATH 227 Survey of Differential Calculus with Algebra (4)  
MATH 234 Introduction to Probability and Statistics (3)  
MATH 235 Introduction to R (1)  
PHIL 312 Business Ethics (3)  
PSY 113 General Psychology (3) **or**  
SOC 110 Introduction to Sociology (3)  
ENGL 387 Technical Report Writing (4) **or**  
COMM 301 Business and Professional Communication (3)

Restricted Electives (9 credits)

Students may choose any three of the following courses. Students may not use more than three credits from BUS 469, BUS 490 and BUS 497 to satisfy this section. The courses must be from at least two areas.

CSIS 153 Introduction to Computers and Programming I-b (3)  
ECON 370 Introduction to Econometrics (3)  
HSAD 403 Health Informatics (3)  
GEOS 205 Thinking Spatially (3)  
GEOS 207 GPS Field Techniques (3)  
GEOS 210 Cartography (3)  
GEOS 307 Introduction to GIS (3)  
GEOS 407 Spatial Analysis (3)  
COMM 354 Social Media Metrics (3)  
PMGT 300 Project Management (3)  
OM 380 Methods Improvement (3)  
MATH 355 Mathematical Modeling (3)  
MATH 336 Intermediate Probability and Statistics II (3)  
PHIL 340 Symbolic Logic (3)  
MKTG 451 Marketing Research 1 (3)  
MKTG 452 Marketing Research 2 (3)  
BUS 469 OR BUS 490 OR BUS 497

**Minor in Business Administration: Business – 15 credits**

Students must take fifteen credits in Business Administration courses above the major requirements in any of the business degree programs. Courses which satisfy major requirements cannot be used to satisfy minor requirements. The courses must be chosen from at least three of the following areas: Accounting, Business, Economics, Finance, Management, or Marketing.

**Minor in Business Administration: Non-Business – 24 credits**

ACCT 230 Principles of Accounting I (3)

ECON 202 Principles of Economics I: Micro (3)  
FINC 340 Financial Management (3)  
MATH 234 Introduction to Probability and Statistics (3)  
MGMT 260 Principles of Management (3)  
MKTG 270 Principles of Marketing (3)

Students must choose one course from two of the following course groupings: MGMT 380, MGMT 433 or MGMT 451; MKTG 311, MKTG 421 or MKTG 451; FINC 360 or FINC 445.

### **Certificate in Business Analytics – 12 credits**

The four-course Business Analytics Certificate Program introduces a broad category of skills, techniques, and applications that facilitate the use of data to generate business intelligence for effective and smart decision making that could be applied to various hierarchical levels and different functional units within any organization. Students of the program will be able to extract, explore, and analyze large amounts of data to develop predictive models, discover meaningful patterns, and generate rules for business decision making. Organizations are now-a-days collecting increasing amounts of data from their business processes, workforce, customers, etc. without knowing much about how this data could be utilized to provide them the needed competitive advantage and improve key outcome measures. It has become increasingly critical for organizations to understand and leverage the capabilities of BA and inform managers on how to use these techniques to make intelligent business decisions and smart choices that not only guide them in their operational activities but also their identifying scientifically strategic directions. This program is endorsed by SAS.

MATH 234 Introduction to Probability and Statistics (3)  
MGMT 370 Management Information Systems (3)  
CSIS 304 Databases (3)  
MGMT 433 or MKTG 433 Predictive Analytics (3)

### **Minor in Entrepreneurship: Non-Business Majors – 15 credits**

The five-course Entrepreneurship Minor Program (15 credits) offers a top-level introduction to the fundamentals of management and entrepreneurship to those who own and run small to medium-sized businesses, as well as to managers responsible for innovation and new product or service development. The program helps individuals who are creating or building new businesses learn the essentials of business and venture initiation. Students will study finance, management and marketing essentials. Designed for non-business majors who have not formally studied business, this program emphasizes the application of classroom concepts to practical decision making in the workplace.

ENTR 229 Introduction to Entrepreneurship (3)  
ENTR 230 Entrepreneurial Finance (3)  
ENTR 231 Entrepreneurial Leadership and Organization (3)  
ENTR 232 Entrepreneurial Marketing (3)  
ENTR 309 Building a Workable Business Plan (3)

### **Minor in Social Innovation & Entrepreneurship: Non-Business Majors – 15 credits**

The minor in Social Innovation and Entrepreneurship is designed for non-business majors and provides the business savvy to start up and lead a not-for-profit organization.

The minor is available to undergraduate non-business majors. There are no prerequisites.



### Student Learning Outcomes

- Assess the impact of a social venture.
- Evaluate the skills necessary to operate and grow a business.
- Define how marketing can be an entrepreneurial activity within organizations.
- Identify the role of marketing in each stage of the entrepreneurial process.
- Get familiar with typical funding sources for new ventures.
- Understand the typical process of new venture creation.

ENTR 229 Introduction to Entrepreneurship (3)

ENTR 232 Entrepreneurial Marketing (3)

ENTR 233 Case Studies in Social Innovation (3)

ENTR 309 Building a Workable Business Plan (3)

Student will choose one course from the following:

ART 345 Art of Social & Environmental Justice (3)

ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)

LEAD 301 Introduction to Leadership (3)

POL 265 International Protection of Human Rights (3)

SOC 210 Social Problems (3)

SOC 325 Social Movements (3)

SW 250 Introduction to Social Welfare and Social Work (3)

### **Certificate in Entrepreneurship – 15 credits**

ENTR 229 Introduction to Entrepreneurship (3)

ENTR 230 Entrepreneurial Finance (3)

ENTR 231 Entrepreneurial Leadership and Organization (3)

ENTR 232 Entrepreneurial Marketing (3)

ENTR 309 Building a Workable Business Plan (3)

### **Minor in International Business: Non-Business – 24 credits**

ACCT 230 Principles of Accounting I (3)

ECON 202 Principles of Economics I: Micro (3)

FINC 340 Financial Management (3)

MATH 234 Introduction to Probability and Statistics (3)

MGMT 260 Principles of Management (3)

MKTG 270 Principles of Marketing (3)

Students must take two of the following courses:

FINC 445 International Financial Management (3)

MGMT 458 International Management (3)

MKTG 444 International Marketing (3)

### **Certificate Doing Business in China – 16 credits**

The Doing Business in China certificate program is designed for students interested in understanding the complexities of doing business in the cultural and political environment of China and the impact of China's remarkable economic transformation on international business. No prior knowledge or experience with

China's business environment is required.

CHIN 101 Beginning Chinese (4)

CHIN 132 Introduction to Chinese Culture (3)

BUS 145 Introduction to International Business (3)

BUS 245 Seminar on Doing Business in China (3)

BUS 345 Business Trip to China (3)

### **Minor in Human Resources: Non-Business majors – 15 credits**

This minor is intended to enhance career opportunities for students pursuing a career in Human Resource Management. The cross-discipline nature of this Minor makes it ideal for students with majors outside of the Paseka School of Business to complete the program without adding an inordinate number of additional credits to their program. The combination of courses assures students will leave MSUM with Human Resource Management capabilities and knowledge that will enable them to successfully manage workers utilizing best practices whilst complying with the myriad of employment laws affecting these tasks.

This certificate is offered to students across disciplines at the university. There are prerequisites required for two of the courses but those are also offered to all university students.

#### **Student Learning Outcomes**

- To provide students with an understanding of the basic human resource management functions including the strategic planning, acquisition, development and compensation of employees.
- To provide students with an understanding of the legal requirements, challenges and compliance issues involved in the management of human resources within an organization.
- To enable students to understand the challenges and nuances of impacting human behavior and development in an organizational setting.
- To ensure students can appreciate and calculate human resource related metrics and to understand the impact of these metrics on organizational success.
- To provide students with the opportunity to apply and/or explore various concepts and techniques utilized by human resource managers.

MGMT 440 Human Resource Management (3)

PARA 321 Employment Law (3)

Choose 3 courses, one from each of these three areas:

#### **Area 1 (People)**

COMM 211 Group & Team Communication (3)

COMM 317 Training & Development (3)

COMM 401 Organizational Communication (3)

#### **Area 2 (Org's)**

ECON 416 Labor Economics (3)

MGMT 451 Organizational Behavior (3)

MGMT 469 HR-Related Internship (1-12)

PSY 323 Industrial/Organizational Psychology (3)

### **Area 3 (Finances)**

MGMT 442 Compensation & Benefits (3)  
MGMT 456 Project Management in Business (3)  
OM 393 Occupational Safety & Health (3)  
PMGT 300 Project Management & Scheduling (3)

### **Minor in Human Resource Business Partner – 21 credits**

This minor enhances a student's comprehension and knowledge of the function of Human Resource Management within a business setting, assuring that this most instrumental resource (people!) is fully and effectively utilized, assuring both business and employee success. This minor acknowledges the multi-faceted business education that students receive through the Paseka School of Business and addresses the inter-relatedness of all business functions in the achievement of strategic business objectives through the utilization of human resources.

This certificate is only available to School of Business majors or graduates and MGMT 440 Human Resource Management has the *prerequisite of MGMT 260* and PARA 321 Employment Law has a *prerequisite of ACCT 280*.

#### **Student Learning Outcomes**

- To provide students with an understanding of the basic human resource management functions including the strategic planning, acquisition, development and compensation of employees in a complex business organization.
- To provide students with an understanding of the legal requirements, challenges and compliance issues involved in the management of human resources within an organization.
- Students will understand the role and inter-relatedness of the organization's human resources activities in the attainment of organizational objectives.
- To ensure students can appreciate and develop human resource related metrics and to understand and communicate the impact of these metrics on organizational success to relevant stakeholders.
- To provide students with the opportunity to apply and/or explore various concepts and techniques utilized by human resource managers.
- To expose students to issues and ethical challenges associated with the management of people in a complex social setting that is under relentless change and competitive pressures.

MGMT 440 Human Resource Management (3) (*prereq of MGMT 260*)  
MGMT 442 Compensation & Benefits (3) (*prereq MGMT 440*)  
PARA 321 Employment Law (3) (*prereq ACCT 280*)

Choose 2 courses from the list below:

COMM 317 Training & Development (3)  
COMM 376 Crisis Communications (3)  
MGMT 451 Organizational Behavior (3)  
MGMT 456 Project Management in Business (3)  
MGMT 469 HR-Related Internship (1-12)  
OM 393 Occupational Safety & Health (3)

### **Minor in Management: Non-Business – 24 credits**

ACCT 230 Principles of Accounting I (3)  
ECON 202 Principles of Economics I: Micro (3)

MATH 234 Introduction to Probability and Statistics (3)  
MGMT 260 Principles of Management (3)  
MGMT 380 Operations Management (3)  
MGMT 405 Small Business Management (3) **or**  
MGMT 440 Human Resource Management (3)  
MGMT 433 Predictive Analytics (3) **or**  
MGMT 451 Organizational Behavior (3)

Students must take one three credit Management elective.

### **Human Resource Strategic Business Partner Certificate – 21 credits**

This certificate is intended to enhance comprehension and knowledge of the function of Human Resource Management within a business setting, assuring that this most instrumental resource (people!) is fully and effectively utilized, assuring both business and employee success. Participants will explore the inter-relatedness of all business functions in the achievement of strategic business objectives through the utilization of human resources.

This certificate is only available to School of Business majors or graduates.

#### **Student Learning Outcomes**

- To provide students with an understanding of the basic human resource management functions including the strategic planning, acquisition, development and compensation of employees.
- To provide students with an understanding of the legal requirements, challenges and compliance issues involved in the management of human resources within an organization.
- Students will understand the role and inter-relatedness of the organization's human resources in the attainment of organizational objectives.
- To ensure students can appreciate and calculate human resource related metrics and to understand and communicate the impact of these metrics on organizational success to relevant stakeholders.
- To provide students with the opportunity to apply and/or explore various concepts and techniques utilized by human resource managers.
- To expose students to issues and ethical challenges associated with the management of people in a complex social setting that is under relentless change and competitive pressures.
- To prepare students to enter the job market better informed of their rights and responsibilities as managers and as employees.

MGMT 440 Human Resource Management (3) (*prereq of MGMT 260*)  
MGMT 442 Compensation & Benefits (3) (*prereq MGMT 440*)  
PARA 321 Employment Law (3) (*prereq of ACCT 280*)

Choose 2 courses from this listing:

COMM 317 Training & Development (3)  
COMM 376 Crisis Communications (3)  
LEAD 301 Introduction to Leadership (3)  
MGMT 416 Labor Economics  
MGMT 451 Organizational Behavior (3)  
MGMT 456 Project Management in Business (3)

## **Human Resource Generalist Certificate – 21 credits**

The Human Resource Generalist Certificate is intended to enhance knowledge and opportunities for individuals pursuing career in Human Resource Management. The cross-discipline nature of this certificate makes it ideal for those with a non-business degrees who wish to enhance their HR knowledge.

MGMT 440 Human Resource Management (3) (*prereq of MGMT 260*)

PARA 321 Employment Law (3) (*prereq of ACCT 304*)

Choose 3 courses, one from each of these three areas:

### **Area 1**

COMM 211 Group & Team Communication (3)

COMM 317 Training & Development (3)

### **Area 2**

COMM 401 Organizational Development (3)

MGMT 451 Organizational Behavior (3)

### **Area 3**

MGMT 442 Compensation & Benefits (3)

OM 393 Occupational Safety and Health (3)

## **Minor in Marketing: Non-Business – 24 credits**

ECON 202 Principles of Economics I: Micro (3)

MATH 234 Introduction to Probability and Statistics (3)

MKTG 270 Principles of Marketing (3)

MKTG 311 Marketing Management (3)

MKTG 421 Consumer Behavior (3)

MKTG 451 Marketing Research I (3)

Students must take six credits of Marketing electives.

## **B.S. Degree in Finance**

To receive the B.S. Degree in Finance, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Exhibit basic knowledge of business principles and processes.
- Write in a clear and professional manner.
- Prepare and deliver an effective business presentation.
- Identify and analyze ethical issues in a professional context.
- Demonstrate basic understanding of business from a global perspective.

### **Core Requirements (27 credits)**

ACCT 230 Principles of Accounting I (3)

ACCT 231 Principles of Accounting II (3)  
ACCT 280 Legal Environment of Business (3)  
MGMT 498 Strategic Management (3)  
FINC 340 Financial Management (3)  
MGMT 260 Principles of Management (3)  
MGMT 371 Introduction to Business Analytics (3)  
MGMT 380 Operations Management (3)  
MKTG 270 Principles of Marketing (3)

Program Requirements (12 credits)

FINC 360 Principles of Investment (3)  
FINC 425 Bank Management I (3)  
FINC 441 Advanced Financial Management (3)  
FINC 445 International Financial Management (3)

Students must complete an experiential learning component in order to graduate. Examples include:

- Internship
- Experiential learning program
- Executive mentorship
- Job shadowing
- Cooperatives
- Study abroad
- Faculty/student research projects
- Participation in academic competitions
- Dragon Fund
- Service learning
- Student academic conference presentations
- Significant class projects for external entities

Related Requirements (33 credits)

In addition to the courses listed below, students must take one Global Course and one Human Diversity course. This requirement can be met by taking one course in LASC 7 and one course in LASC 8. COMM 301 OR ENGL 387 is the writing-intensive course for this major. Students may substitute CSIS 103 and CSIS 104A for CSIS 104.

COMM 100 Speech Communication (3)  
CSIS 104 Spreadsheet and Database Applications (3)  
ECON 202 Principles of Economics I: Micro (3)  
ECON 204 Principles of Economics II: Macro (3)  
MATH 229 Topics in Calculus (3) **or**  
MATH 227 Survey of Differential Calculus with Algebra (4)  
MATH 234 Introduction to Probability and Statistics (3)  
PHIL 312 Business Ethics (3)  
PSY 113 General Psychology (3) **or**  
SOC 110 Introduction to Sociology (3)  
ENGL 387 Technical Report Writing (4) **or**  
COMM 301 Business and Professional Communication (3)

### Restricted Electives (12 credits)

Students must complete 12 credits from the following courses. Students may not use more than three credits from FINC 469, FINC 490 and FINC 497 to satisfy this section.

ECON 320 Money and Banking (3)  
ACCT 330 Intermediate Accounting I (3)  
ACCT 331 Intermediate Accounting II (3)  
FINC 325 Financial Institutions and Markets (3)  
FINC 345 Personal Finance (3)  
FINC 352 Principles of Insurance and Risk Management (3)  
FINC 354 Real Estate Finance and Investments (3)  
FINC 426 Bank Management II (3)  
FINC 446 Financial Decision Making (3)  
FINC 450 Entrepreneurial Finance (3)  
FINC 460 Portfolio Analysis and Management (3)  
FINC 462 Financial Analysis and Valuation (3)  
FINC 463 Futures and Options (3)  
FINC 465 Portfolio Management Practicum (1-3)  
FINC 469 Internship (1-12)  
FINC 490 Topics in Finance (1-3)  
FINC 497 Independent Study (1-3)

### **Minor in Finance: Business – 15 credits**

Students must take fifteen credits in Finance courses above the major requirements for any of the business degree programs. Courses which satisfy major requirements cannot be used to satisfy minor requirements.

### **Minor in Finance: Non-Business – 24 credits**

ACCT 230 Principles of Accounting I (3)  
ECON 202 Principles of Economics I: Micro (3)  
FINC 340 Financial Management (3)  
FINC 360 Principles of Investment (3)  
FINC 445 International Financial Management (3)  
MATH 234 Introduction to Probability and Statistics (3)

Students must earn six credits in Finance electives. Students may not use Accounting or Economics courses to fulfill this requirement.

### **Bank Management Certificate – 9 credits**

The Bank Management Certificate Program will consist of three courses taught within the School of Business department's Finance Major.

Admission to Certificate requires FINC 360 Investments or the permission of the instructors.

### **Student Learning Outcomes**

- Understand why banks and the income statements and balance sheets of banks are unique.
- Apply advanced fixed income risk and financial concepts to the management of financial institutions.

- Employ the techniques used in the industry today to underwrite commercial and commercial real estate loan requests.
- Analyze and make decisions regarding strategies you would employ as the bank manager, learning the results and consequences. React to the market and financial implications of decisions and respond with dynamic strategies in managing a bank.
- Develop and implement strategies to maximize the value of the bank.
- Develop and understanding of the legal and regulatory structure of the banking industry, inclusive of historical milestones.
- Apply financial concepts to the management of financial institutions.
- Utilize available tools and technologies to analyze bank performance and risk positions for privately held and publicly traded banking organizations. Understand what makes entrepreneurial finance different from Corporate Finance.
- Consider the minimum financial aspects to incorporate in a business plan and understand that the financial plan is a dynamic tool to monitor the value and risk of the business.
- Understand how the timing of searching for external capital affects the potential ownership share of the entrepreneur.
- Consider the effects of the (1) high ownership concentration in the hands of the entrepreneur and (2) the difficult of forecasting expected financial performance, in the valuation process of the business or venture.
- Understand valuation from the entrepreneur's and investor's perspective and why these two values are going to be different.

FINC 425 Bank Management I (3)

FINC 426 Bank Management II (3)

FINC 450 Entrepreneurial Finance (3)

### **Corporate Financial Management Certificate – 9 credits**

The Corporate Financial Management Certificate Program will consist of three courses taught within the School of Business department's Finance Major.

Admission to Certificate requires FINC 340 Financial Management or the permission of the instructor.

#### **Student Learning Outcomes**

- Apply Net Present Value and other investment criteria.
- Evaluate capital budgeting proposals by generating pro forma financial statements and cash flows.
- Apply the capital asset pricing model to estimate required return on investments.
- Estimate the cost of capital for a corporation.
- Evaluate effects of alternative capital structure proposals.
- Evaluate effects of alternative dividend policies.
- Evaluate corporate finance problems in value creation, financial modeling, cost of capital, capital budgeting, initial public offering, capital structure, risk management, financing alternatives and restructuring through cases.
- Identify the best course of action given constraints and defend the course chosen.
- Prepare case reports.
- Understand what makes entrepreneurial finance different from Corporate Finance.
- Consider the minimum financial aspects to incorporate in a business plan and understand that the financial plan is a dynamic tool to monitor the value and risk of the business.



- Understand how the timing of searching for external capital affects the potential ownership share of the entrepreneur.
- Consider the effects of the (1) high ownership concentration in the hands of the entrepreneur and (2) the difficulty of forecasting expected financial performance, in the valuation process of the business or venture.
- Understand valuation from the entrepreneur's and investor's perspective and why these two values are going to be different.

FINC 441 Advanced Financial Management (3)

FINC 446 Financial Decision Making (3)

FINC 450 Entrepreneurial Finance (3)

### **Investment Management Certificate – 9 credits**

The Investment Management Certificate Program will consist of three courses taught within the School of Business department's Finance Major for a total of 9 credits.

Admission to Certificate requires FINC 340 Financial Management (3) or the permission of the instructor.

#### **Student Learning Outcomes**

- Distinguish among major assets that trade in money and capital markets.
- Discuss capital market theory and the use of CAPM in security selection.
- Describe the process of bond valuation and various measures of returns.
- Discuss bond features and sensitivity of its price to interest rates.
- Describe the top down approach to security analysis.
- Describe the portfolio management process.
- Prepare an Investment Policy Statement.
- Describe the process of managing individual investor portfolios and institutional investor portfolios.
- Evaluate equity and fixed-income portfolio management strategies.
- Evaluate performance of a portfolio.
- Examine the structure and characteristics of derivatives markets: options, forward, futures and swaps.
- Apply option pricing models: the Binomial Model and the Black-Scholes Model.
- Evaluate option price sensitivities.
- Evaluate pricing of forwards, futures and swaps.
- Evaluate alternative derivative strategies to manage risk.

FINC 360 Principles of Investment (3)

FINC 460 Portfolio Analysis and Management (3)

FINC 463 Futures and Options (3)

### **School of Entertainment Industries and Technology**

**School of Entertainment Industries and Technology**

**Center for the Arts 116, (218) 477-2126**

**Chair:** Ryan Jackson

**Faculty:** Ryan Jackson, Michael Krajewski

The Bachelor of Science in Entertainment Industries and Technology (EIT) at MSUM is one of very few programs that offer a degree specific to the entertainment industry. EIT offers emphasis in audio production

and entertainment business, and allows students to choose a focus in a number of different areas to allow for a high degree of specialization, or a broad study of the industry.

Through dynamic partnerships with the Paseka School of Business, School of Media Arts and Design, School of Performing Arts, and the College of Humanities and Social Sciences, students will take courses in related areas focusing on unique career preparation. Those skills then are re-focused within the context of the entertainment industry.

### **B.S. Degree in Entertainment Industries and Technology**

In depth study of the entertainment industry including topics in business, legal, and technology associated with careers in specific areas within the entertainment industry. Students will choose one or more areas of interdisciplinary study to further focus their skills.

Admission Requirements: Students interested in the B.S. in Entertainment Industries and Technology may declare their major upon being accepted to Minnesota State University Moorhead.

A placement interview with Entertainment Industries and Technology faculty is required, and must be scheduled during your first week of classes.

#### **Student Learning Outcomes**

- Students will be able to identify where skills cross-over exists between many different areas within the entertainment industry.
- Students will be able to adapt to many areas across the entertainment industry.
- Students will synthesize their research and writing into an appropriate professional portfolio of their work that addresses their specific area of focus within entertainment.
- Students will be able to function at a professional level within their specific chosen area(s) of concentration within the entertainment industry.

#### **Core Requirements (21 credits)**

All students must complete the following core in EIT (21 credits)

EIT 160 Intro to the Entertainment Industry (1)

EIT 161 Intro to Copyright and Trademark (3)

EIT 180 Critical Listening and Sound Analysis I (2)

EIT 261 Legal and Ethical Issues in Entertain. (3)

EIT 361 Entertainment Activity (1 x 4)

EIT 461 Entertainment Entrepreneurship (2)

EIT 492 Professional Seminar (3) (WI)

ACCT 230 Principles of Accounting I (3)

#### **Program Requirements (30 credits)**

Students must complete 120 credits total, including 42 LASC credits and FYE 101, with 40 credits at the 300-level, or higher. Students will choose courses within the approved interdisciplinary rubrics. They are also encouraged to choose a minor (s) from these areas. A customized specialization through courses in other areas not listed is also possible on a case-by-case basis. Students will be allowed to choose a minor or specialized plan after successful completion of EIT 160. Students will choose either one or both emphasis areas. Students who elect to do both emphasis areas will be limited to 8 credits of electives from approved areas.

- Students will choose from the following interdisciplinary rubrics to complete their degree.
- Students may choose to do a specialized plan by mandatory consultation with their primary academic advisor and a representative from the chosen specialty area.
- Approved interdisciplinary rubrics are as follows (must have 30 elective credits):  
ACCT, BUS, COMM, EIT, ENTR, FILM, GCOM, MUS, PARA, THTR

### **Audio Technology Emphasis**

#### **Program Requirements (24 credits)**

EIT 181 Audio and Technology Theory (3)  
 EIT 182 Intro to Audio Recording (2)  
 EIT 280 Critical Listening and Sound Analysis II (2)  
 EIT 281 Live and Studio Production (3)  
 EIT 381 Studio Projects (2)  
 EIT 382 Live Sound Reinforcement/Recording (2)  
 EIT 383 Sound for Film and Video (2)  
 EIT 481 Advanced Studio Projects (1 x 2)  
 THTR 255 Stagecraft (3)  
 THTR 356 Lighting Studio (3) *every other year*

### **Entertainment Business Emphasis**

#### **Program Requirements (26 credits)**

EIT 362 Artist and Venue Management (2)  
 ENTR 229 Introduction to Entrepreneurship (3)  
 ENTR 232 Entrepreneurial Marketing (3)  
 PARA 251 Legal Research and Writing (WI) (3)  
 PARA 321 Employment Law (3)  
 PARA 350 Contract Law and Drafting (3)  
 COMM 301 Business and Prof. Communication (3)  
 COMM 383 Event Planning (3)  
 COMM 351 Messaging for Mobile (3)

### **Minor in Audio Production and Technology – 19 credits**

A study of the entertainment industry including topics in business, legal, and technology associated with careers in specific areas within the entertainment industry.

#### **Student Learning Outcomes**

- Students will master audio and other associated entertainment technologies for use within their chosen degree program.
- Students will be able to use audio and other associated technologies appropriately across many disciplines within the field of entertainment.

EIT 160 Intro to the Entertainment Industry (1)  
 EIT 180 Critical Listening and Sound Analysis I (2)  
 EIT 181 Audio and Technology Theory (3)  
 EIT 182 Intro to Recording/Reinforcement (2)

EIT 280 Critical Listening and Sound Analysis II (2)  
EIT 281 Live and Studio Production (3)  
EIT 361 Entertainment Activity (1)  
EIT 381 Studio Production (2)  
EIT 382 Live Sound and Recording (2)  
EIT 481 Projects in Studio Production (1)

### **Minor in Entertainment Business – 19 credits**

A study of the entertainment industry including topics in business, legal, and technology associated with careers in specific areas within the entertainment industry.

#### **Student Learning Outcomes**

- Students will be able to synthesize key topics within their chosen degree program to fit within specific business areas in the entertainment industry.
- Students will have the skills necessary to adapt to the rapidly changing professional environment in the entertainment industry.

EIT 160 Intro to the Entertainment Industry (1)  
EIT 161 Intro to Copyright and Trademark (3)  
EIT 261 Legal and Ethical Issues in Entertainment (3)  
EIT 361 Entertainment Entrepreneurship (3)

Choose ONE of the following sequences

#### **Entrepreneurship**

ENTR 229 Intro to Entrepreneurship (3)  
ENTR 232 Entrepreneurial Marketing (3)  
ENTR 309 Building a Workable Business Plan (3)

#### **Paralegal**

PARA 251 Legal Research and Writing (WI) (3)  
PARA 321 Employment Law (3)  
PARA 350 Contract Law and Drafting (3)

#### **Communications**

COMM 301 Business and Prof. Communication (3)  
COMM 383 Event Planning (3)  
COMM 351 Messaging for Mobile (3)

### **School of Communication and Journalism**

**School of Communication and Journalism**

**MacLean Hall 260, (218) 477-2983**

**Chair:** Aaron Quanbeck

**Faculty:** Jason Anderson, Liz Conmy, Heidi Everett, Rebecca Gardner, Deneen Gilmour, Colan Hanson, Theresa Hest, Merrie Sue Holtan, Anthony Ocana, Chris Walker, Camilla Wilson

*The **School of Communication and Journalism** offers majors in Advertising, Integrated Advertising & Public Relations, Broadcast Journalism, Communication Studies, Documentary Journalism, English & Mass*

*Communications, Multimedia Journalism, Photojournalism, and Public Relations. Minors are offered in Advertising, Broadcast Journalism, Communication Studies, Leadership Studies, Mass Communications, Media Analysis, Photojournalism, Public Relations, and Sports Communications. A certificate is offered in Publishing.* Today's world demands professionals who can communicate clearly and work effectively with others. Today's world requires that we evaluate messages and make good decisions based on what we see and hear. Today's world needs leaders who have clear visions for the future and an ability to make those visions into a reality. Each of the majors offered in the School of Communication and Journalism balances the breadth of the liberal arts and sciences curriculum with the depth of a program specific curriculum to provide a student with a well-rounded education. Graduates complete a total of 120 credits with a minimum of 40 credits in coursework at the 300 to 400 levels. Distribution of the total credits needed to complete the baccalaureate degree include 42 credits in the liberal arts and sciences curriculum; 39 to 69 credits in a selected major; and the remaining credits earned through internship credits, restricted and/or unrestricted elective credits.

Each of the professional majors include coursework designed to enhance a student's verbal and visual storytelling skills, as well as the technical skills needed to effectively share a message(s) using multimedia platforms. Additionally, each of the professional majors includes theory-based coursework that addresses contemporary issues involving rhetorical theories of communication, principles of effective communication, communication ethics, and communication law. The goal of each major is to prepare the graduate for a professional communication career.

Additionally, the major in Communication Studies is a professional major whose goal is to provide career preparation designed to be applicable in numerous industries as well as providing the research background needed for advanced degree work. Within the Communication Studies major, students may choose one of the following emphases: 1) Event Planning and Promotion, 2) Communication Training and Development, 3) Sales Communication, or 4) Sports Communication.

Similarly, with its liberal arts base, the dual major in English and Mass Communication provides career preparation applicable in numerous industries, and the publishing industry in particular, as well as providing the research background needed for advanced degree work.

### **Mission Statement**

The primary mission of the School of Communication and Journalism is to empower students to become effective communicators in the modern era. Through experiential learning activities, we prepare storytellers who can create, refine, evaluate, and distribute messages that have an impact on the world around them.

### **Vision Statement**

The School of Communication and Journalism aspires to be a leader in preparing communicators to influence their communities and the world. We strive to become the top choice for students wanting to apply classroom knowledge and emerging technologies to current professional practices. Toward this end, we will further develop our network of professional communicators, regionally and nationally, in order to best prepare students to contribute immediately when they graduate.

### **Overarching Learning Outcomes**

Overarching learning outcomes for the programs involved in the School of Communication and Journalism are, by the very nature of the discipline, rhetorical in their roots. While each program major identifies learning outcomes based upon its own professional standards, practices, and evolving trends in the industries and careers served by the program major, all still find their roots in classical rhetorical communication theory. Each of the School's program majors is inclusive of the following learning outcomes:

- To develop an ability to critically analyze a communication situation to discover its salient issues for purposes of developing an appropriate response.
- To develop an ability to identify and evidence responsive talking points that provide a critical response for the public(s) involved in the communication situation.
- To develop an ability to effectively partition the response as a means of maximizing the impact of the messaging on those involved in the communication situation.
- To develop an ability to strategically select the media platform(s) to be employed as the communication vehicle(s) to engage the public(s) involved in the communication situation.
- To develop an ability to effectively employ the use of visual and verbal symbols, motion and sound as a means of adding an appropriate level of clarity and emphasis to one's messaging.
- To develop the skill set(s) needed to effectively deliver one's message to those involved in the communication situation.
- To develop an understanding and commitment to upholding the ethical standards of communication that is a part of the situation being addressed.
- To demonstrate an ability to work collaboratively as a member of a group or team.
- To demonstrate the ability to create publication documents/productions that meet industry-based standards.

## **B.S. Degree in Advertising**

The major in Advertising balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in advertising, along with a choice of unrestricted electives to provide a well-rounded educational experience. Majors must complete 120 credits with a minimum of 57 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in LASC, 57 credits in the advertising program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the journalism profession.

In addition to the overarching learning outcomes, nuanced learning outcomes of the advertising major are:

- Demonstrate an awareness and understanding of the principles of advertising.
- Demonstrate an awareness and understanding of the ethical standards of the advertising profession.
- Demonstrate an awareness and understanding of the information-sharing process, the relationship-building process, and the centrality of the process of persuasion to advertising.
- Demonstrate entry level competency to research, create, write, design, and produce advertising visual and verbal messaging, and campaigns.
- Develop an awareness and understanding of the process of buying and selling of media.
- Demonstrate an ability to work collaboratively as a member of a team.
- Demonstrate a competency to produce an advertising document that meets entry-level, industry standards.
- Demonstrate entry-level professional competence through the successful completion of an internship or other professional field experience.

### Core Requirements (57 credits)

COMM 101 Introduction to Mass Media (3)

COMM 210 Media Writing (3)

COMM 220 Layout & Typography I (3)

COMM 230 Photography (3)

COMM 251 Video Production for Advertising, News, & Public Relations (3)

COMM 283 Advertising Principles (3)

COMM 284 Public Relations Principles (3)  
COMM 305 Imaging and Photo Illustration (3)  
COMM 306 Advertising Copywriting (3)  
COMM 320 Layout & Typography II (3)  
COMM 324 International Communications (3)  
COMM 351 Messaging for Mobile Media (3)  
COMM 352 Social Media Campaigns (3)  
COMM 365 Media Planning (3)  
COMM 383 Event Planning (3)  
COMM 400 Media Ethics and Issues (3)  
COMM 403 Communications Law (3)  
COMM 459 Advertising Campaign Research (3)  
COMM 460 Advertising Campaign Execution (3)

## **B.S. Degree in Broadcast Journalism**

The major in Broadcast Journalism balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in broadcast journalism, along with a choice of unrestricted electives to provide a well-rounded educational experience. Majors must complete 120 credits with a minimum of 40 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in LASC, 45 credits in the broadcast journalism program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the journalism profession.

In addition to the overarching learning outcomes, nuanced learning outcomes of the broadcast journalism major are:

- Demonstrate an awareness and understanding of the principles of broadcast journalism.
- Demonstrate an awareness and understanding of the ethical standards of the journalism profession.
- Investigate, write, report, photograph, edit and produce news for television.
- Demonstrate an ability to work collaboratively as a member of a team.
- Develop and produce a television documentary (traditionally in fall semester) that meets professional industry standards.
- Develop and produce a weekly television news program (traditionally in spring semester), *Campus News*, that meets professional industry standards.
- Demonstrate an entry-level professional competency through the successful completion of an internship or other professional field experience.

### Core Requirements (45 credits)

Students are required to enroll in COMM 344 twice, concurrently with COMM 342 and with COMM 343. COMM 342 and COMM 343 may not be taken together.

COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 308 Broadcast Journalism (3)  
COMM 309 Reporting (3)  
COMM 324 International Communications (3)  
COMM 341 TV News Writing (3)

COMM 342 TV News Reporting (3)  
COMM 343 TV News Photography (3)  
COMM 344 TV News Video Editing (3) \*must be taken twice for 6 credits  
COMM 400 Media Ethics and Issues (3)  
COMM 403 Communications Law (3)  
COMM 440 Broadcast Documentary (3)

## **B.A. Degree in Communication Studies**

The Communication Studies represents a unique major with its roots in Aristotle's examination of the art of logic, argument, and persuasion. Over time, the communication discipline has evolved to examine human interaction and behavior using social scientific approaches to understand the world. As a result, Communication Studies also aims to bridge the gap between the study of psychology (i.e., the mind) and sociology (i.e., the context, the situation) by seeking to better understand human communication through social scientific practices. Today, researchers might take any number of approaches to examining human communication including a focus on message production, message processing, and message effects in a variety of contexts including interpersonal, group, intercultural, family, health, and social influence to name just a few. Communication is at the core of one's work, community, and personal relationships. We cultivate young professionals for successful careers in a variety of industries including: education, health care, technology, business, non-profits, helping professions, sales, and media organizations. To that end, students may complete the major as designed, or they may select a career-focused emphasis in 1) Event Planning and Promotion; 2) Communication Training and Development; 3) Sales Communication; and 4) Sports Communication. Completion of 120 credits is required to graduate which includes the Liberal Arts and Sciences Core (42 credits).

- Develop an ability to critically analyze a communication to discover its salient issues for purposes of developing an appropriate response.
- Develop an ability to identify and evidence responsive talking points that provide a critical response for the public (s) involved in the communication situation.
- Develop an ability to effectively partition the response as a means of maximizing the impact of the messaging on those involved in the communication situation.
- Develop an ability to strategically select the media platform(s) to be employed as a communication vehicle(s) to engage the public(s) involved in the communication situation.
- Develop an ability to effectively employ the use of visual and verbal symbols, motion and sound as a means of adding an appropriate level of clarity and emphasis to one's messaging.
- Develop the skill set(s) needed to effectively deliver one's message to those involved in the communication situation.
- Develop an understanding and commitment to upholding the ethical standards of communication that is a part of the situation being addressed.

Inherent to the above stated objectives are demonstrating a foundational knowledge of communication research methods and the role of research in the creation of knowledge; recognizing, diagnosing, and responding to communication situations using appropriate communication theories and concepts; effectively presenting communication messages in a variety of contexts and situations; to analyzing communication messages in a variety of cultures, contexts and situations; and to demonstrating the knowledge to successfully manage group environments and / or interpersonal relationships.

### Core Requirements (30 credits)

COMM 110 Introduction to Communication Studies (3)



COMM 201 Interpersonal Communication (3) **OR**  
COMM 202 Family Communication (3)  
COMM 211 Group and Team Communication (3)  
COMM 285 Intercultural Communication (3)  
COMM 301 Business and Professional Communication (3)  
COMM 310 Rhetorical Theory and Criticism (3) **OR**  
COMM 410 Rhetoric of Popular Culture (3)  
COMM 311 Principles of Persuasion (3)  
COMM 315 Communication Theory (3)  
COMM 319 Communication Research Methods (3)  
COMM 496 Communication Studies Senior Seminar (3) \*Must earn grade of C- or above.

#### Restricted Electives (21 credits)

21 credits of unrestricted electives drawn from any COMM or LEAD rubric courses, and may include COMM 100.

#### Event Planning and Promotion Emphasis

Required core of 30 credits, plus 9 credits of unrestricted electives drawn from courses carrying a COMM or LEAD rubric, as well as the following 12 credits of restricted credits: COMM 210 Media Writing (3), COMM 284 Public Relations Principles (3), COMM 307 Writing for Public Relations (3), and COMM 383 Event Planning (3).

#### Communication Training and Development Emphasis

Required core of 30 credits, plus 9 credits of unrestricted electives drawn from courses carrying a COMM or LEAD rubric, as well as the following 12 credits of restricted credits: LEAD 301 Introduction to Leadership (3), COMM 317 Training and Development (3), COMM 376 Crisis Communication (3), and COMM 401 Organizational Communication (3).

#### Sales Communication Emphasis

Required core of 30 credits, plus 9 credits of unrestricted electives drawn from courses carrying a COMM or LEAD rubric, as well as the following 12 credits of restricted credits: COMM 352 Social Media Campaigns (3), COMM 354 Social Media Metrics (3), COMM 366 Personal Selling (3), and COMM 423 Marketing Communication (3).

#### Sports Communication Emphasis

Required core of 30 credits, plus 9 credits of unrestricted electives drawn from courses carrying a COMM or LEAD rubric, as well as the following 12 credits of restricted credits: COMM 210 Media Writing(3), COMM 380 Foundations of Sports Communication (3), COMM 381 Sports and the Media (3), and COMM 382 Sports Promotion (3).

### **B.A. Degree in English & Mass Communication**

A student's B.A. degree will include 33 credits earned in the Department of English and 33 credits earned in the School of Communication and Journalism. The dual major is available for those wishing to concentrate on writing. A student may choose to focus the writing experience to coincide with an interest in advertising,

broadcast journalism, communication studies, documentary journalism, integrated advertising and public relations, photojournalism, multimedia journalism, or public relations. A student may select his/her major advisor from either the Department of English or the School of Communication and Journalism. Students are encouraged to get advising from faculty in both program units.

#### Core Requirements (36 credits)

**ENGL 300 is a prerequisite for all Core courses.**

ENGL 300 Introduction to Literary Studies (3)

ENGL 311 Major British Writers I (3)

ENGL 314 Topics in Shakespeare (3)

ENGL 371 Survey of American Literature I (3)

ENGL 380 World Literature (3)

COMM 101 Introduction to Mass Media (3)

COMM 210 Media Writing (3)

COMM 220 Layout and Typography I (3)

COMM 230 Photography (3)

COMM 324 International Communications (3)

COMM 400 Mass Media Ethics and Issues (3)

COMM 403 Communications Law (3)

#### Electives (18 credits)

Students must take 9 elective credits in English courses and 9 elective credits in communications courses. The English elective credits must be at the 300 level or above and at least one course must be at the 400 level. Further, at least one course must be in American literature and at least one course must be in British literature. The English electives should be chosen in close consultation with an advisor from the English Department. The communications electives must also be chosen in close consultation with a faculty advisor in the School of Communication and Journalism department and may be drawn from any COMM or LEAD rubric.

#### Restricted Electives (12 credits)

Students must choose nine credits from the listed English courses and must also choose a three credit communications course from those listed.

ENGL 285 Scriptwriting (3)

ENGL 288 Introduction to Creative Writing (3)

ENGL 387 Technical Report Writing (3)

ENGL 388 Creative Writing (3)

ENGL 395 Theory and Methods of Tutoring (3)

ENGL 487 Advanced Technical Report Writing (3)

COMM 306 Advertising Copywriting (3) **or**

COMM 307 Writing for Public Relations (3) **or**

COMM 309 Reporting (3)

COMM 306, COMM 307, or COMM 309 are writing intensive options for the major.

### **B.S. Degree in Integrated Advertising & Public Relations**

The major in Integrated Advertising and Public Relations balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in both advertising and public relations, along with a choice of unrestricted electives to provide a well-rounded educational experience. Majors must complete 120 credits with a minimum of 40 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in

LASC, 69 credits in the advertising and public relations program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the journalism profession.

In addition to the overarching learning outcomes, the nuanced learning outcomes of the integrated advertising and public relations major are:

- Demonstrate an awareness and understanding of the principles of both advertising and public relations.
- Demonstrate an awareness and understanding of the ethical standards of both the advertising and public relations professions.
- Demonstrate an awareness and understanding of the information sharing process, the relationship building process and the centrality of the process of persuasion to advertising and public relations.
- Demonstrate entry-level competency to research, create, write, design and produce both advertising and public relations visual and verbal messaging, campaigns, and special events.
- Develop an awareness and understanding of the process of buying and selling media.
- Demonstrate an ability to work collaboratively as a member of a team.
- Demonstrate a competency to produce an advertising or public relations document that meets entry-level, industry standards.
- Demonstrate entry-level professional competence through the successful completion of an internship or other professional field experience.

#### Core Requirements (69 credits)

Campaign Research and Execution must be taken in the same topic area: both courses must be either in advertising or both courses in public relations.

COMM 101 Introduction to Mass Media (3)

COMM 210 Media Writing (3)

COMM 220 Layout and Typography I (3)

COMM 230 Photography (3)

COMM 251 Video Production for Advertising, News, and Public Relations (3)

COMM 283 Advertising Principles (3)

COMM 284 Public Relations Principles (3)

COMM 305 Imaging and Photo Illustration (3)

COMM 306 Advertising Copywriting (3)

COMM 307 Writing for Public Relations (3)

COMM 320 Layout and Typography II (3)

COMM 324 International Communications (3)

COMM 327 Editing Public Relations Copy (3)

COMM 351 Messaging for Mobile Media (3)

COMM 352 Social Media Campaigns (3)

COMM 365 Media Planning (3)

COMM 375 Strategies and Tactics in Public Relations (3)

COMM 383 Event Planning (3)

COMM 400 Media Ethics and Issues (3)

COMM 403 Communications Law (3)

COMM 423 Marketing Communications (3)

COMM 459 Advertising Campaign Research (3) **and**

COMM 460 Advertising Campaign Execution (3) **or**

COMM 470 Public Relations Campaign Research (3) and  
COMM 471 Public Relations Campaign Execution (3)

## **B.S. Degree in Multimedia Journalism**

The major in Multimedia Journalism balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in multimedia journalism, along with a choice of unrestricted electives to provide a well-rounded educational experience. Majors must complete 120 credits with a minimum of 40 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in LASC, 48 credits in the multimedia journalism program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the journalism profession.

In addition to the overarching learning outcomes stated, the nuanced learning outcomes of the multimedia journalism major are:

- Demonstrate an awareness and understanding of the principles of journalism.
- Demonstrate an awareness and understanding of the ethical standards of the journalism profession.
- Investigate, write, report, digitally photograph and digitally edit video and still photographs, copy-edit, design and produce content that incorporates formatting for both online and off-line publications.
- Demonstrate an ability to work collaboratively as a member of a team.
- Develop and publish an online publication that meets entry-level, industry standards.
- Demonstrate entry-level professional competency through the successful completion of an internship or other professional field experience.

### Core Requirements (48 credits)

Students must take COMM 344 concurrently with either COMM 342 or COMM 343.

COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 251 Video Production for Advertising, News, and Public Relations (3)  
COMM 309 Reporting (3)  
COMM 321 Copy Editing (3)  
COMM 324 International Communications (3)  
COMM 330 Photojournalism (3)  
COMM 342 TV News Reporting (3) **or**  
COMM 343 TV News Photography (3)  
COMM 344 TV News Video Editing (3)  
COMM 352 Social Media Campaigns (3)  
COMM 400 Mass Media Ethics and Issues (3)  
COMM 403 Communications Law (3)  
COMM 406 Feature Writing (3)  
COMM 420 Digital Storytelling (3)

## **B.S. Degree in Photojournalism**

The major in Photojournalism balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in photojournalism, along with a choice of unrestricted electives to provide a well-

rounded educational experience. Majors must complete 120 credits with a minimum of 40 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in LASC, 45 credits in the photojournalism program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the journalism profession.

In addition to the overarching learning outcomes, the nuanced learning outcomes of the photojournalism major are:

- Demonstrate an awareness and understanding of the principles of photojournalism.
- Demonstrate an awareness and understanding of the ethical standards and legal requirements of the journalism profession.
- Demonstrate the ability to digitally photograph and edit photos and video for newspapers, television, multimedia publications and social media.
- Demonstrate the ability to work collaboratively as a member of a team.
- Photograph and edit stories for Campus News, a weekly program broadcast on Prairie Public Television (traditionally in the spring semester).
- Shoot and edit still photography for a documentary photography project.
- Shoot video and record audio for a television documentary (traditionally in the fall semester).
- Demonstrate an entry-level professional competency through the successful completion of an internship or other professional field experience.

#### Core Requirements (45 credits)

Students must take COMM 343 and COMM 344 concurrently.

COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 305 Imaging & Photo Illustration (3)  
COMM 309 Reporting (3)  
COMM 320 Layout and Typography II (3)  
COMM 324 International Communications (3)  
COMM 330 Photojournalism (3)  
COMM 343 TV News Photography (3)  
COMM 344 TV News Video Editing (3)  
COMM 400 Media Ethics and Issues (3)  
COMM 403 Communications Law (3)  
COMM 430 Documentary Photography (3)  
COMM 440 Broadcast Documentary (3)

### **B.S. Degree in Public Relations**

The major in Public Relations balances the breadth of the liberal arts and sciences curriculum with the depth of a professional curriculum in public relations, along with a choice of unrestricted electives to provide a well-rounded educational experience. Majors must complete 120 credits with a minimum of 60 credits at the 300-400 levels. Majors will complete a minimum of 42 credits in LASC, 60 credits in the public relations program, and the remaining credits will be available as unrestricted electives. Internships, while not formally required, are strongly encouraged to gain additional insight into the public relations profession.

In addition to the overarching learning outcomes, the nuanced learning outcomes of the public relations major are:

- Demonstrate an awareness and understanding of the principles of public relations.
- Demonstrate an awareness and understanding of the ethical standards of the public relations profession.
- Demonstrate an awareness and understanding of the information sharing process, the relationship building process and the centrality of the process of persuasion to public relations.
- Demonstrate entry level competency to research, create, write, design and produce public relations visual and verbal messaging, campaigns, and special events.
- Demonstrate an ability to work collaboratively as a member of a team.
- Demonstrate a competency to produce a public relations document that meets entry-level, industry standards.
- Demonstrate entry-level professional competence through the successful completion of an internship or other professional field experience.

#### Core Requirements (60 credits)

COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 251 Video Production for Advertising, News, and Public Relations (3)  
COMM 283 Advertising Principles (3)  
COMM 284 Public Relations Principles (3)  
COMM 305 Imaging and Photo Illustration (3)  
COMM 307 Writing for Public Relations (3)  
COMM 320 Layout and Typography II (3)  
COMM 324 International Communications (3)  
COMM 327 Editing Public Relations Copy (3)  
COMM 351 Messaging for Mobile Media (3)  
COMM 352 Social Media Campaigns (3)  
COMM 375 Strategies and Tactics in Public Relations (3)  
COMM 383 Event Planning (3)  
COMM 400 Mass Media Ethics and Issues (3)  
COMM 403 Communications Law (3)  
COMM 470 Public Relations Campaign Research (3)  
COMM 471 Public Relations Campaign Execution (3)

#### **Minor in Advertising – 18 credits**

The minor in Advertising is designed to introduce students to advertising and develop one's skills in verbal and visual storytelling.

#### **Student Learning Outcomes**

- Develop an awareness and understanding of the analytical process used to design an advertising message for a defined situation.
- Demonstrate professional, entry-level proficiency in composition of an advertising message designed to influence product selection among a target public.
- Demonstrate an ability to work collaboratively with others on an advertising project.
- Develop an awareness of the strategies and tactics used in the advertising industry.

COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 251 Video Production for Advertising, News, and Public Relations (3)  
COMM 283 Advertising Principles (3)  
COMM 306 Advertising Copywriting (3)

### **Minor in Broadcast Journalism – 18 credits**

The minor in Broadcast Journalism is designed to introduce students to broadcast journalism and develop one's skills in verbal and visual storytelling.

#### **Student Learning Outcomes**

- Develop an awareness and understanding of the analytical process used to design a news story in response to defined situation.
- Demonstrate professional, entry-level proficiency in the composition of a broadcast journalism message designed to share information with a target public.
- Demonstrate an ability to work collaboratively with others on a broadcast journalism task.
- Develop an awareness and understanding of the strategies and tactics used in the broadcast journalism environment.

COMM 210 Media Writing (3)  
COMM 251 Video Production of Ads, News, & PR (3)  
COMM 308 Broadcast Journalism (3)  
COMM 341 TV News Writing (3)  
COMM 342 TV News Reporting (3)  
COMM 344 TV News Editing (3)

### **Minor in Communication Studies – 15 credits**

The goals of the minor in Communication Studies are to introduce students to both the theory and practice of human communication in a variety of contexts and interactive settings.

#### **Student Learning Outcomes**

- Demonstrate a foundational knowledge of the process of communication.
- Create effective communication messages in a variety of contexts and situations.
- Effectively present communication messages in a variety of contexts and situations.
- Demonstrate the knowledge to successfully participate in group environments and/or interpersonal relationships.

COMM 110 Introduction to Communication Studies (3)  
COMM 211 Group and Team Communication (3)  
COMM 301 Business and Professional Communication (3)  
COMM 315 Communication Theory (3)  
COMM 310 Rhetorical Theory and Criticism (3) **or**  
COMM 410 The Rhetoric of Popular Culture (3)

## **Minor in Leadership Studies – 15 credits**

The Leadership Studies Minor will intentionally develop the knowledge, skills and experiences of students so they will be leaders as students, professionals and citizens.

### **Student Learning Outcomes**

- Students will be able to evaluate their own leadership strengths and weaknesses.
- Students will identify major perspectives of leadership and be able to apply those perspectives to a range of interactions.
- Students will develop the strategies to work with others to achieve specific goals.
- Students will develop an ability to apply ethical theories to leadership situations.
- Students will have the ability to effectively lead others on a project or in an organization.

COMM 211 Group and Team Communication (3)

PHIL 215 Contemporary Moral Issues (3)

LEAD 301 Introduction to Leadership (3)

PMGT 385 Process Leadership (3)

LEAD 498 Leadership Seminar (3)

## **Minor in Mass Communications – 27 credits**

The goals of the minor in Mass Communications are to introduce students to the profession of mass communications and develop one's skills in verbal and visual storytelling. Students can concentrate electives in a particular area of interest or may choose to take a broad range of electives from the communication majors in advertising, integrated advertising and public relations, public relations, broadcast journalism, multimedia journalism, and photojournalism.

COMM 101 Introduction to Mass Media (3)

COMM 210 Media Writing (3)

COMM 220 Layout and Typography I (3)

COMM 230 Photography (3)

Students must choose nine credits of electives in COMM, topically linked to one or more of the majors in Advertising, Public Relations, Broadcast Journalism, Integrated Advertising and Public Relations, Multimedia Journalism, or Photojournalism.

Students must choose two courses from the following list.

COMM 324 International Communications (3)

COMM 400 Mass Media Ethics and Issues (3)

COMM 403 Communications Law (3)

## **Minor in Media Analysis – 18 credits**

The minor in Media Analysis is designed to introduce students to the strategic use of media.

### **Student Learning Outcomes**

- Develop an awareness of the process employed in media planning.
- Develop an understanding of the process employed in selecting media.
- Develop proficiency in evaluating the efficacy of media used to deliver messaging to a targeted public.



COMM 101 Introduction to Mass Media (3)  
COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 352 Social Media Campaigns (3)  
COMM 354 Social Media Metrics (3)  
COMM 365 Media Planning (3)

### **Minor in Photojournalism – 18 credits**

The minor in Photojournalism is designed to introduce students to photojournalism and develop one's skills in visual storytelling.

#### **Student Learning Outcomes**

- Develop an awareness and understanding of the analytical process used to design a news photograph in response to defined situation.
- Demonstrate professional, entry-level proficiency in the composition of a photojournalism message designed to share information with a target public.
- Demonstrate an ability to work collaboratively with others on a photojournalism task.
- Develop an awareness and understanding of the strategies and tactics used in a photojournalism environment.

COMM 343 and COMM 344 must be taken concurrently.

COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 320 Layout and Typography II (3)  
COMM 330 Photojournalism (3)  
COMM 343 TV News Photography (3)  
COMM 344 TV News Editing (3)

### **Minor in Public Relations – 18 credits**

The minor in Public Relations is designed to introduce students to public relations and develop one's skills in verbal and visual storytelling.

#### **Student Learning Outcomes**

- Develop an awareness and understanding of the analytical process used to design a public relations response to defined situation.
- Demonstrate professional, entry-level proficiency in the composition of a public relations message designed to share information with a target public.
- Demonstrate an ability to work collaboratively with others on a public relations task.
- Develop an awareness and understanding of the strategies and tactics used in the public relations environment.

COMM 210 Media Writing (3)  
COMM 220 Layout and Typography I (3)  
COMM 230 Photography (3)  
COMM 284 Public Relations Principles (3)  
COMM 307 Writing for Public Relations (3)  
COMM 375 Strategies and Tactics in Public Relations (3)

## Minor in Sports Communication – 18 credits

The minor in Sports Communications is designed to introduce students to Sports Communications and develop one's skills in verbal and visual storytelling.

### Student Learning Outcomes

- Develop an awareness and understanding of the analytical process used to design a response to defined sports communications situation.
- Demonstrate an entry-level, professional proficiency in composing sports communication messaging designed to share information with a target public.
- Demonstrate an ability to work collaboratively with others in producing a sports communication initiative.

COMM 210 Media Writing (3)

COMM 220 Layout and Typography I (3)

COMM 353 Audio and Video Production Online (3)

COMM 380 Foundations of Sports Communication (3)

COMM 381 Sports Information and the Media (3)

COMM 382 Sports Promotions (3)

## Certificate in Publishing – 12 credits

As a joint venture among the Departments of English and the School of Communication and Journalism, the goal of the Certificate in Publishing is to introduce students to the publishing industry through writing and editing experiences.

### Student Learning Outcomes

- Demonstrate an awareness and understanding of the principles of constructing a text designed for publication.
- Copy-edit texts in accordance to the standards employed in the publishing industry.
- Demonstrate an ability to work collaboratively as a member of a publications team.
- Demonstrate entry-level professional competency through the successful completion of the practicum in publishing afforded through the required curriculum.

Students must complete at least 3 credits of practicum.

COMM 402 Introduction to Publishing (3)

COMM 462 Practicum in Publishing (3)

Students must complete at least 6 credits chosen from the following list of electives:

ENGL 288 Introduction to Creative Writing (3)

ENGL 388 Creative Writing (3) **\*Must take pre-req ENGL 288**

ENGL 488 Advanced Creative Writing (3) **\*Must take pre-req ENGL 388**

ENGL 490 Special Topics (1-3)

ENGL 486 Tutorial (1-3)

COMM 307 Writing for Public Relations (3)

COMM 309 Reporting (3)

COMM 321 Copy Editing (3)

COMM 327 Editing Public Relations Copy (3)  
COMM 381 Sports Information & the Media (3)  
COMM 390 Special Topics (3)  
COMM 406 Feature Writing (3)  
COMM 420 Digital Storytelling (3)  
COMM 469 Internship (1-6)  
COMM 490 Special Topics (3)  
COMM 497 Individual Study (1-3)

## **School of Media Arts and Design**

### **School of Media Arts and Design**

**Roland Dille Center for the Arts 116, (218) 477-2126**

**Chairs:** Tom Brandau and Don Clark

**Faculty:** Anthony Adah, Tom Anstadt, Trista Conzemius, Alexandria Fogarty, Kyja Kristjansson-Nelson, Raymond Rea

*The **School of Media Arts and Design** offers majors in Animation, Film Production, Film Studies, Graphic Communications, and Graphic Design. Minors offered are in Film History and Criticism, Film Production, Graphic Communications, and Media Arts.*

The faculty and students of the School of Media Arts and Design are linked together by a common focus on the creation and analysis of messages that powerfully affect their chosen audience. We provide a challenging, contemporary, relevant curriculum within the context of the Liberal Arts that prepares our graduates to become contributing and ethical citizens in a diverse, global community. We promote creativity, critical thinking, and lifelong discovery through courses that integrate theory and history with practice and application.

### **Animation**

The **B.A. degree in Animation** provides a broad range of classes that focus on both traditional and contemporary animation techniques, including the theory, practice, and aesthetics of motion image creation, image sequencing, and frame manipulation. Students are introduced to filmic systems, motion image history and theory, media arts practices, as well as a range of software, hardware, practical tools and techniques. Course projects and lectures focus on stop motion, rotoscoping, pixilation, technical graphics, motion graphics, 3D modeling, abstract and experimental animation, animation for live performance, installation, interactive and new media environments.

Graduates may find employment with animation studios, video production houses, television stations, multimedia, web, and advertising agencies, as well as data visualization markets in science, medical, and business fields.

### **Film**

The School of Media Arts and Design offers a **B.A. degree in Film Production**, as well as a **B.A. degree in Film Studies**. These majors are designed for students who wish to work in some aspect of the film industry as well as those who are interested in the academic study of film.

The Film Studies major focuses on the theoretical and historical analysis of cinema as it relates to various genres, directors, and other topical studies. Emphasis is placed in visual and critical analysis, media literacy, curating, festival programming and critical writing skills. Students are encouraged to build a writing portfolio

and to publically present academic work at the Student Academic Conference, as well as professional conferences.

The Film Production major gives students the opportunity to get hands-on experience in directing, producing, cinematography, sound and picture editing, sound recording, and screenwriting. Production classes incorporate the traditional format of 16mm film, HD video and new digital technologies into the curriculum. Abstract motion image creation, experimental practices, installation, documentary and non-fiction practices, as well as narrative filmmaking are all taught within the major. Students will build a portfolio of work from freshman through senior year.

Graduates of our program have gone on to work for major galleries, film festivals, post-production houses, trailer and special effects houses, television networks, independent feature film production, and freelance positions in all departments of production. Additionally, our students have gone on to some of the top graduate schools in North America.

### **Graphic Communications**

The **B.A. degree in Graphic Communications** educates students in many areas of the graphics industry, including interactive multimedia, 3D graphics, and digital design and production. The degree program provides experiences in computer graphics, multimedia, photography, printing, advertising, graphic design, motion graphics, and television.

Courses train students in the technologies and principles necessary to design graphics, layout images, manipulate and enhance images, prepare projects for offset lithographic press, use digital prepress techniques, create multimedia projects, design websites, front end coding and scripting, as well as produce technical graphics, motion graphics, 3D modeling and animation. Projects are prepared from concept to production.

Graduates work in advertising agencies, web design firms, newspaper and magazine companies, printing companies, in-house corporations, video and television production, television stations, as well as music and multimedia production agencies.

### ***Declaring a Graphic Communications Major***

As a part of declaring a Graphic Communications major, students must first complete the **Pre-Graphic Communications** program (see GCOM Handbook on website). Once completed, students must apply for admission to the Graphic Communications program.

### ***Graduation Requirements for a Graphic Communications Major***

To graduate with a B.A. degree in Graphic Communications, students must complete **ALL** of the courses in the major with a “**C**” or above and have a GCOM major **GPA of at least 3.0**. Any course transferred into the major needs to have a grade of C or above.

### **Graphic Design**

The **BFA in Graphic Design's** program guides students through the nuanced skill development process required to achieve excellence in typography, print, packaging, visual identity and branding, experience design, and motion graphics. The faculty is comprised of recognized professionals who challenge their students to reach their personal creative potential.

In order to achieve its mission of providing a stimulating environment for education in the professional practice and critical study of graphic design, the graphic design program is engaged in the continual

development and refinement of its curricula. These efforts reflect the graphic design faculty's high standards of professionalism and scholarship, and their efforts to maintain up-to-date technologies and practices for the innovative study of graphic design.

The BFA in Graphic Design is accredited through the National Association of Schools of Art and Design (NASAD).

### ***BFA Graphic Design Requirements***

- Minimum GPA of 3.0 in all major coursework
- A grade of C or higher must be earned in order for all major courses to count towards the major
- Senior Project Exhibition
- Sophomore Portfolio Review
- Senior Project Review

### ***Additional Degree Requirements***

Undergraduate students will meet and complete the following criteria:

Computer and Software Requirement: A Macintosh laptop computer with appropriate software is 'highly recommended' for students majoring in Graphic Design and entering their first 303 level course. Specifications for the hardware and software may be obtained from the professors or the MSUM bookstore.

Internship, Mentorship and Study Abroad: Students seeking a Graphic Design degree must seek out and complete an internship, mentorship or study abroad opportunity. Internship requests should be made to the major advisor and must be approved for credit in advance.

## **B.A. Degree in Animation**

The Animation major concentrates on the creation of technical graphics, 3D modeling, and techniques used in the animation industry, including game graphics and 3D simulations. Classes also include film studies and video/audio production. Graduates may find employment with animation studios, video production houses, television stations, music industry, multimedia, web, and advertising agencies. To receive the B.A. Degree in Animation, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

A major GPA of 2.5 and completion of all 100 and 200 level courses in the major prior to advancing to the 300 and 400 level coursework.

### **Student Learning Outcomes**

- In production classes, students will utilize three phases of animation (pre-production, production, and post-production) in the creation of animated projects.
- Students will demonstrate knowledge of animation history, animation theory, production, and post-production aesthetics.
- Students will demonstrate knowledge of animation principles, practices and techniques. These include: specialized use of animation lexicon, traditional stop motion animation (including cinematography principles, lighting and sound elements, directing, producing and editing concepts), motion graphics and computer animation.

- Students will examine and analyze animation texts and articulate conclusions as to their historical and critical values.
- Students will integrate evaluation and theory with research/production skills in the creation of a capstone project for academic public presentation.

#### Core Requirements (40 credits)

ANIM 113 MAYA (3)  
 ANIM 216 3D Modeling (3)  
 ANIM 316 3D Animation (3)  
 ANIM 416 Animation Studio (3)  
 ANIM 366 Motion Graphics (3)  
 FILM 100 Technical Training: Video Production (1)  
 FILM 172 Video Production (3)  
 FILM 280 History of Film (3)  
 FILM 280S Studio in Film History (1)  
 FILM 281 Film Appreciation (3)  
 FILM 281S Studio in Film Appreciation (1)  
 FILM 375 Animation Techniques (3)  
 FILM 480 Film Theory and Criticism (3)  
 FILM 492A Senior Seminar Project Development (1)  
 FILM 492B Senior Seminar (3)  
 GCOM 255 Beginning Computer Graphics (3)

#### Restricted Electives (12 credits)

Choose 12 credits from the following list:

ART 101 Basic Drawing I (4)  
 ART 170 Art Appreciation (3)  
 COMM 230 Photography (3) **or**  
 ART 203F Photography (4)  
 ENGL 285 Scriptwriting (3)  
 ENGL 286 Writing for the Workplace (3)  
 ENGL 288 Introduction to Creative Writing (3)  
 ENGL 388 Creative Writing (3)  
 FILM 200 Technical Training: Beginning Filmmaking (1)  
 FILM 284 Beginning Filmmaking (3)  
 FILM 290 Topics in Film (1-3)  
 FILM 384 Techniques of Film Directing (4)  
 FILM 386 Genre Studies (3)  
 FILM 372 Editing Techniques (3)  
 FILM 378 Techniques of Producing (3)  
 FILM 387 Director Studies (3)  
 FILM 388 Topical Studies (3)  
 FILM 390 Topics in Film (1-3)  
 FILM 400 Technical Training: Intermediate Filmmaking (1)  
 FILM 416 Special Projects in Film (1-3)  
 FILM 469 Internship (1-12)  
 FILM 472 Advanced Video Production (3)

FILM 484 Intermediate Filmmaking (3)  
FILM 490 Topics in Film (1-3)  
GCOM 355 Intermediate Computer Graphics (3)  
GCOM 455 Advanced Computer Graphics (3)  
GCOM 457 Digital Prepress (3)  
GCOM 266 Introduction to Multimedia (3)  
GCOM 366 Intermediate Web Design (3)  
GCOM 368 Advanced Web Design (3)  
PHIL 320 Philosophy of Art (3) or  
ART 320 Philosophy of Art (3)

## **B.A. Degree in Film Production**

The Film Production major is designated for students who wish to work in some aspect of the film industry as well as those who are interested in the academic study of film. Classes incorporate the traditional format of film and new digital technologies into the curriculum. The Film Production major gives students the opportunity to get hands-on experience in cinematography, picture and sound editing, directing, producing and screenwriting. To receive the B.A. Degree in Film Production, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Students will utilize three phases (preproduction/production/postproduction) of production preparation in the creation of film and video projects.
- Students will demonstrate knowledge of film history, production aesthetics and theory.
- Students will demonstrate knowledge of basic filmmaking practices and techniques. These include: specialized language use, cinematography principles, lighting and sound elements, editing and directing concepts.
- Students will examine, analyze, and articulate conclusions as to the historical/critical values inherent in film text materials.
- Students will integrate evaluation, theory and production/research skills in the creation of a capstone project for public presentation.

### **Core Requirements (38 credits)**

ENGL 285 Scriptwriting (3)  
FILM 100 Tech Training: Video Production (1)  
FILM 101A Practicum (1)  
FILM 172 Video Production (3)  
FILM 200 Tech Training: Beginning Filmmaking (1)  
FILM 280 History of Film (3)  
FILM 280S Studio in Film History (1)  
FILM 281 Film Appreciation (3)  
FILM 281S Studio in Film Appreciation (1)  
FILM 284 Beginning Filmmaking (3)  
FILM 384 Techniques of Film Directing (4)  
FILM 386 Genre Studies (3) **or**  
FILM 387 Director Studies (3) **or**  
FILM 388 Topical Studies (3)  
FILM 400 Tech Training: Intermediate Filmmaking (1)

FILM 480 Film Theory and Criticism (3)  
FILM 484 Intermediate Filmmaking (3)  
FILM 492A Senior Seminar Project Development (1) *\*was FILM 402*  
FILM 492B Senior Seminar (3) *\*was FILM 496*

#### Restricted Electives (13 credits)

Students must complete at least 13 credits and must include one Film course.

ART 170 Art Appreciation: Content and Form (3)  
ART 233 Global Art History I (3)  
ART 234 Global Art History II (3)  
ENGL 288 Introduction to Creative Writing (3)  
ENGL 388 Creative Writing (3)  
FILM 290 Topics in Film (1-3)  
FILM 371 History of LGBT Representation in Film (3)  
FILM 372 Editing Techniques (3)  
FILM 375 Animation Techniques (3)  
FILM 378 Techniques of Producing (3)  
FILM 383 Adaptations to Film (3)  
FILM 385 Survey of International Cinema (3)  
FILM 385S Studio in International Cinema (1)  
FILM 386 Genre Studies (3)  
FILM 387 Director Studies (3)  
FILM 388 Topical Studies (1-3)  
FILM 390 Topics in Film (1-3)  
FILM 416 Special Projects in Film (1-3)  
FILM 469 Internship (1-12)  
FILM 472 Advanced Video Production (3)  
FILM 490 Topics in Film (1-3)  
ANIM 216 3D Modeling (3)  
ANIM 316 3D Animation (3)  
ANIM 416 Animation Studio (3)  
COMM 230 Photography (3) **or**  
ART 203F Introduction to Photography (4)  
COMM 251 Video Production for Ad, News, and PR (3)  
PHIL 320 Philosophy of the Arts (3) **or**  
ART 320 Philosophy of the Arts (3)  
THTR 230 Acting I: Principles (3)  
THTR 232 Principles of Makeup for Stage and Film (2)  
THTR 235 Directing I: Principles (3)  
THTR 255 Stagecraft (3)  
THTR 322 Drama II (3)

#### **B.A. Degree in Film Studies**

The Film studies major is designed for students who wish to work in some aspect of the film industry as well as those who are interested in the academic study of film. Classes incorporate the traditional format of film and new digital technologies into the curriculum. The Film Studies major focuses on the theoretical and historical analysis of cinema as it relates to various genres, directors and other topical studies. To receive the B.A.



Degree in Film Studies, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Students will utilize three phases (preproduction/production/postproduction) of production preparation in the creation of film and video projects.
- Students will demonstrate knowledge of film history, production aesthetics and theory.
- Students will demonstrate knowledge of basic filmmaking practices and techniques. These include: specialized language use, cinematography principles, lighting and sound elements, editing and directing concepts.
- Students will examine, analyze, and articulate conclusions as to the historical/critical values inherent in film text materials.
- Students will integrate evaluation, theory and production/research skills in the creation of a capstone project for public presentation.

#### Core Requirements (37 credits)

FILM 100 Technical Training: Video Production (1)

FILM 101A Practicum (1)

FILM 172 Video Production (3)

FILM 280 History of Film (3)

FILM 280S Studio in Film History (1)

FILM 281 Film Appreciation (3)

FILM 281S Studio in Film Appreciation (1)

FILM 302 Practicum (1)

FILM 383 Adaptations to Film (3)

FILM 385 Survey of International Cinema (3)

FILM 385S Studio in International Cinema (1)

FILM 386 Genre Studies (3)

FILM 387 Director Studies (3)

FILM 388 Topical Studies (3)

FILM 480 Film Theory and Criticism (3)

FILM 492A Senior Seminar Project Development (1)

FILM 492B Senior Seminar (3)

#### Restricted Electives (18 credits)

Choose one of the following three courses below (will be repeated for credit).

FILM 386 Genre Studies (3)

FILM 387 Director Studies (3)

FILM 388 Topical Studies (3)

Students must complete at least 12 credits and must include one Film course.

ART 170 Art Appreciation: Content and Form (3)

ART 233 Global Art History I (3)

ART 234 Global Art History II (3)

COMM 315 Communication Theory (3)

COMM 310 Rhetorical Theory and Criticism (3)

COMM 410 The Rhetoric of Popular Culture (3)  
ENGL 285 Scriptwriting (3)  
FILM 200 Tech Training: Beginning Filmmaking (1)  
FILM 284 Beginning Filmmaking (3)  
FILM 290 Topics in Film (1-3)  
FILM 372 Editing Techniques (3)  
FILM 375 Animation Techniques (3)  
FILM 378 Techniques of Producing (3)  
FILM 384 Techniques of Film Directing (4)  
FILM 390 Topics in Film (1-3)  
FILM 416 Special Projects in Film (1-3)  
FILM 469 Internship (1-12)  
FILM 472 Advanced Video Production (3)  
FILM 490 Topics in Film (1-3)  
PHIL 320 Philosophy of the Arts (3) **or**  
ART 320 Philosophy of the Arts (3)  
THTR 230 Acting I: Principles (3)  
THTR 235 Directing I: Principles (3)  
THTR 255 Stagecraft (3)  
THTR 322 Drama II (3)

## **B.A. Degree in Graphic Communications**

Graphic Communications majors focus on the creation and production of visual images. Coursework explores areas of print production and design as well as web and multimedia development. Intensive hands-on instruction with access to the latest industry equipment and software prepares graduates with professional industry knowledge and experience to excel in a variety of related career fields. To receive the B.A. Degree in Graphic Communications, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Pre-Graphic Communications Classification**

Students who declare a Graphic Communications (GCOM) major are classified as Pre-Graphic Communications and cannot move to the Upper-Level Core courses until they complete all of the Foundation Core courses (all 100- and 200-level courses in the major) with a grade of “C” or higher and a major GPA of at least 3.0.

Once a Pre-GCOM student has met all the requirements, the student must apply for admission to the GCOM program. Admission to the program enables the student to register for courses in the GCOM Upper-Level Core. Once this application is approved by the GCOM program advisors, the student will receive the GCOM program code (0049) on their DAR and will be able to register for courses in the Upper-Level Core.

The student-initiate application for admission must provide evidence that:

- 1) The student has earned a “C” or above in all Pre-GCOM coursework (all Foundation Core courses), including transfer courses.
- 2) The student’s major GPA is at least 3.0 at the time of admission to the GCOM program.
- 3) The student has completed or enrolled in the 60th semester credit.

### **Graphic Communications Graduation Requirements**

To graduate with a degree in Graphic Communications, students must complete all courses in the major with a

“C” or above (which includes Foundation Core, Upper-Level Core, and Electives) and have a major GPA of at least 3.0.

The program of study is designed to prepare a professional graphic communicator who possesses skills and knowledge acquired through education and hands-on experience necessary to secure entry-level employment in one of the following areas: graphic and digital design, multimedia authoring and development, web authoring and development, and computer animation.

#### Student Learning Outcomes

- The student will be able to apply oral, written, graphic and effective listening skills.
- The student will be able to implement various forms of manual and computer technology inclusive in the development and production of the visual image. This includes the many industry standard hardware and software applications used by the graphic communications industry.
- The student will be able to apply the methods of the graphic communications industry as described by the American Institute of Graphic Arts (AIGA), Printing Industries of America (PIA), and Graphic Communications Association (GCA).
- The student will be able to understand the sequence of estimating work. This includes the design and implementation of a company, the establishing of BHR's, equipment selection, workspace design, and job estimation.
- The student will be able to initiate a design project, formulate and communicate the purpose and scope of their project, work independently to complete all aspects of the project within the assigned timeframe, and present and interpret their work to industry practitioners.

#### Foundation Core Requirements (20 credits)

All 100- and 200-level courses in the major. Students are classified as **Pre-Graphic Communications** and cannot move to the Upper-Level Core until they complete all of the Foundation Core courses with a grade of “C” or higher and a major GPA of 3.0.

ART 125 Foundation Design (4)

ANIM 113 Maya (3) **or** ANIM 216 3D Modeling (3)

GCOM 255 Beginning Computer Graphics (3)

GCOM 266 Introduction to Multimedia (3)

GDES 203 Introduction to Graphic Design (4)

COMM 230 Photography (3)

#### Upper-Level Core Requirements (22 credits)

Courses marked with \* require consent of advisor and Senior status in the major.

GCOM 355 Intermediate Computer Graphics (3)

GCOM 366 Intermediate Web Design (3)

GCOM 368 Advanced Web Design (3)

GCOM 455 Advanced Computer Graphics (3)

GCOM 457 Digital Prepress (3)

GCOM 458 Digital Design & Production Studio (3) **or** GCOM 468 Interactive Multimedia Studio (3)

\*GCOM 492A Graphic Communication Final Project A (2) *\*was GCOM 459A*

\*GCOM 492B Graphic Communication Final Project B (2) *\*was GCOM 459B*

#### LASC Related Requirements (7 credits)

PHIL 312 Business Ethics –or– PHIL 318 Professional Ethics (3)  
FILM 280/FILM 280S History of Film –or– FILM 281/FILM 281S Film Appreciation (4)

### Electives (12 credits)

Twelve credits of elective courses from the following list. At least three credits MUST be a GCOM 290 or GCOM 390 course (special topics course).

GCOM 290/GCOM 390 Topics in GCOM (3)  
GCOM 458 Digital Design & Production Studio (3) **or** GCOM 468 Interactive Multimedia Studio (3)  
(whichever course not taken in the Upper-Level Core)  
GDES 303 Typography (4)  
GDES 304 Visual Concepts & Research (4)  
GDES 305 Visual Systems & Brand Identity (4)  
GDES 306 Motion Design (4)  
ANIM 316 3D Animation (3)  
ANIM 366 Motion Graphics (3)  
ANIM 416 Animation Studio (3)  
FILM 172 Video Production (3) 26726  
–and– FILM 100 Tech Training: Video Production (1)  
(FILM 100 must be taken with FILM 172)  
FILM 372 Editing Techniques (3)  
ART 101 Basic Drawing I (4)  
EIT 161 Intro to Copyright & Trademark Law (3)  
EIT 181 Audio Technology Theory (3)  
EIT 261 Legal & Ethical Issues in Entertainment (3)

## **B.F.A. Degree in Graphic Design**

Traditional and computer processes are utilized for in-depth studio investigations into various conceptual and technical applications to achieve effective visual communication solutions. Investigations deal with one or more of the following: symbols, typography, information design, systems, 3D, visual concepts, visual research, motions graphics, brand identity, web design, and multimedia. Projects may include logos, brochures, posters, magazine layouts, packaging, web sites, mobile applications, motion graphics, and many more issues that deal with visual communications and society. The BFA in Graphic Design is considered the professional and specialized degree program for entry into practice. To receive the BFA Degree in Graphic Design, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits). A 3.0 GPA or above in major requirements is required for graduation. Students must earn a grade of C or higher in any major course requirement.

Graphic Design is a constant evolving profession. Students are called upon more and more to have backgrounds in the various fields of media arts including sound, film, and motion. This program takes into account what employers are looking for in today's design graduates. The competencies listed below are taken from the National Association of Schools of Art & Design Handbook, our accrediting agency.

**3. Essential Competencies, Opportunities, and Experiences** (*in addition to those stated for all professional degree programs in Sections VIII.B. and C.*):

**A. The ability to conceive and to design visual communications and systems involving various integrations of the elements of professional practice outlined in items 3.b. through g. below.**

**B. Understanding and use of basic visual communication principles and processes, including but not limited to:**

- Understanding of how communication theories, principles, and processes have evolved through history and the ability to use this knowledge to address various types of contemporary problems.
- Understanding of and ability to develop strategies for planning, producing, and disseminating visual communications.
- Functional knowledge of creative approaches, and the analytical ability to make appropriate, purpose-based choices among them, and to use such approaches to identify communication opportunities and generate alternative solutions.
- Ability to plan the design process and construct narratives and scenarios for describing user experiences.
- Fluency in the use of the formal vocabulary and concepts of design—including content, elements, structure, style, and technology—in response to visual communication problems. Studies in critical theory and semiotics are strongly recommended.
- Ability to develop informed considerations of the spatial, temporal, and kinesthetic relationships among form, meaning, and behavior and apply them to the development of various types of visual communication design projects.
- Ability to use typography, images, diagrams, motion, sequencing, color, and other such elements effectively in the contexts of specific design projects.

**C. Ability to incorporate research and findings regarding people and contexts into communication design decision-making, including but not limited to:**

- Ability to frame and conduct investigations in terms of people, activities, and their settings, including, but not limited to using appropriate methods for determining people's wants, needs, and patterns of behavior, and developing design responses that respect the social and cultural differences among users of design in local and global contexts.
- Understanding of design at different scales, ranging from components to systems and from artifacts to experiences.
- Ability to exercise critical judgment about the student's own design and the design of others with regard to usefulness, usability, desirability, technological feasibility, economic viability, and sustainability in terms of long-term consequences.

**D. Acquisition of collaborative skills and the ability to work effectively in interdisciplinary or multidisciplinary teams to solve complex problems.**

**E. Understanding of and the ability to use technology, including but not limited to:**

- Functional understanding of how to continue learning technology, recognizing that technological change is constant.
- Ability to conduct critical evaluations of different technologies in specific design problem contexts, including the placement of technical issues in the service of human-centered priorities and matching relationships between technologies and the people expected to use them.
- Functional capability to shape and create technological tools and systems to address communication problems and further communication goals.
- Ability to recognize and analyze the social, cultural, and economic implications of technology on message creation and production and on human behavior, and to incorporate results into design decisions.

**F. Understanding of and ability to use basic research and analysis procedures and skills, including but not limited to:**

- Acquisition of research capabilities and skills such as using databases, asking questions, observing users, and developing prototypes.

- Ability to use analytical tools to construct appropriate visual representations in the execution of research activities.
- Ability to interpret research findings practically and apply them in design development.
- Ability to support design decisions with quantitative and qualitative research findings at various stages of project development and presentation.

**G. Functional knowledge of professional design practices and processes, including but not limited to professional and ethical behaviors and intellectual property issues such as patents, trademarks, and copyrights.**

**H. Experience in applying design knowledge and skills beyond the classroom is essential. Opportunities for field research and experience, internships, collaborative programs with professional and industry groups, and international experiences are strongly recommended. Such opportunities to become oriented to the working profession should be supported through strong advising.**

#### Core Requirements (69 credits)

ART 101 Drawing I (4)

ART 125 Foundation Design (4)

ART 233 Global Art History I (3) (LASC 8)

ART 234 Global Art History II (3) (LASC 8)

FILM 280 History of Film (3)

FILM 280S Studio in Film History (1) (FILM 280 co-requisite)

GCOM 255 Beginning Computer Graphics (3)

GCOM 266 Beginning Multimedia (3)

GDES 203 Intro to Graphic Design (4)

GDES 303 Typography (4)

GDES 304 Experience Design (4)

GDES 305 Visual Systems and Brand Identity (4)

GDES 306 Motion Design: Typography and Visual Narratives (4)

GDES 307 Advanced Typography (4)

GDES 375 History of Graphic Design (4)

GDES 492A BFA Senior Project (4)

GDES 492B BFA Senior Project (4)

GDES 469 Internship (6)

COMM 301 Business & Professional Communication **OR** ENGL 387 Technical Report Writing (3)

**\*\*Designated Writing Intensive Course for Major\*\***

69 credits - 3 credits count towards LASC

#### **BFA Graphic Design Degree Requirements:**

- Minimum GPA of 3.0 in major requirements
- A grade of C or better must be earned in order for any program course requirement to count towards the major
- GDES Portfolio Review #1 at the end of the sophomore year
- BFA Senior Project Review #2
- BFA Senior Exhibit

#### **Additional Degree Requirements:**

- Computer and Software Requirement

- A Macintosh laptop computer with appropriate software is 'highly recommended' for students majoring in Graphic Design and entering their first 303 level course. Specifications for the hardware and software may be obtained from the professors or the MSUM bookstore.
- Internship
  - Students seeking a Graphic Design degree must seek out and complete an internship opportunity. Internship requests should be made to the major advisor and must be approved for credit in advance.

### Restricted Electives (10-12 credits)

Student must take three intro courses OR two intro courses and one intermediate studio from the list of courses below. 10-12 credits

#### Intro courses:

ART 102 Basic Drawing II (4)  
 ART 203A Introduction to Ceramics and Clay Processes (4)  
 ART 203C Introduction to Painting (4)  
 ART 203D Introduction to Printmaking (4)  
 ART 203E Introduction to Sculpture (4)  
 ART 203F Introduction to Photography (4)  
 ART 203L Introduction to Illustration (4) (ART 102 pre-requisite)  
 ART 203N Introduction to Papermaking (4)  
 FILM 172 Video Production (3)  
 FILM 100 Tech Training: Video Production (1) (FILM 172 co-requisite)  
 EIT 181 Audio Technology Theory (3)

#### Intermediate courses:

FILM 200 Tech Training: Beginning Filmmaking (1)  
 FILM 284 Beginning Filmmaking (3) (FILM 200 co-requisite)  
 FILM 101A Practicum (1) (FILM majors only)  
 FILM 302 Practicum (1)  
 FILM 372 Editing Techniques (3) (FILM 172 pre-requisite)  
 FILM 383 Adaptations to Film (3)  
 FILM 384 Techniques of Film Directing (4)  
 FILM 385 Survey of International Cinema (3)  
 FILM 385S Studio in International Cinema (1)  
 FILM 386 Genre Studies (3)  
 FILM 387 Director Studies (3)  
 FILM 388 Topical Studies (3)  
 ANIM 216 3D Modeling (3)  
 GCOM 355 Intermediate Computer Graphics (3)  
 GCOM 366 Intermediate Web Design (3)  
 GCOM 368 Advanced Web Design (3)

#### Recommended Electives

ART 102 Basic Drawing II (4)

ART 233M Global Art History I: Methods (1)  
ART 234M Global Art History II: Methods (1)

### **Minor in Film History & Criticism – 22 credits**

FILM 280 History of Film (3)  
FILM 280S Studio in Film History (1)  
FILM 281 Film Appreciation (3)  
FILM 281S Studio in Film Appreciation (1)  
FILM 385 Survey of International Cinema (3)  
FILM 385S Studio in International Cinema (1)  
FILM 386 Genre Studies (3) **or**  
FILM 387 Director Studies (3) **or**  
FILM 388 Topical Studies (3)  
FILM 480 Film Theory and Criticism (3)

Students must complete four elective credits, at least one of the elective courses must be an upper division Film Studies course not listed in the minor requirements section.

### **Minor in Film Production – 22 credits**

FILM 100 Technical Training: Video Production (1)  
FILM 172 Video Production (3)  
FILM 200 Technical Training: Beginning Filmmaking (1)  
FILM 281 Film Appreciation (3)  
FILM 281S Studio in Film Appreciation (1)  
FILM 284 Beginning Filmmaking (3)  
FILM 384 Techniques of Film Directing (4)  
FILM 480 Film Theory and Criticism (3)

Any upper division Film Studies course not listed in the minor requirements section for a minimum of three credits.

### **Minor in Graphic Communications – 21 credits**

GCOM 255 Beginning Computer Graphics (3)  
GCOM 266 Introduction to Multimedia (3)

Students must choose six credits of Graphic Communications electives. GCOM 492A, GCOM 492B, and GCOM 469 are excluded from these electives and are prohibited from being used in a GCOM minor.

Students must select 3D Graphics (216, 316, 416) OR Digital Design and Production (355, 455, 457) OR Interactive Multimedia (366, 368, and Anim 366) for a total of nine credits.

ANIM 216 3D Modeling (3)  
ANIM 316 3D Animation (3)  
ANIM 416 Animation Studio (3)  
GCOM 355 Intermediate Computer Graphics (3)  
GCOM 455 Advanced Computer Graphics (3)  
GCOM 457 Digital Prepress (3)  
GCOM 366 Dreamweaver/CSS (3)



GCOM 368 Multimedia Authoring with Flash (3)  
ANIM 366 Motion Graphics (3)

### **Minor in Media Arts – 25 credits**

Students learn an interdisciplinary approach to contemporary arts, digital and emerging media technologies within the context of the theory and practice of our disciplines and a liberal arts education. Students explore a range of tools, software and arts disciplines as a means to enable expansive experimentation and innovative creative research. Students begin by building theory, knowledge and foundational skills in various areas of study, including film, computer graphics, web media, technical theatre design, and the recording arts. Students are then challenged to synthesize theory and practice through collaborative inquiry to produce an interdisciplinary capstone project. 25 credits and must receive permission to declare minor.

Students must maintain a GPA of 3.0 in all Media Arts coursework.

ART 125 Foundation Design I (4)  
FILM 100 Technical Training: Video Production (1)  
FILM 172 Video Production (3)  
ANIM 216 3D Modeling (3) **or**  
GCOM 255 Beginning Computer Graphics (3) **or**  
GCOM 266 Introduction to Multimedia (3)  
MART 100 Foundations in Media Arts (1)  
MART 492 Capstone Project in Media Arts (1)  
EIT 181 Audio Technology Theory (3)  
THTR 255 Stagecraft (3)

Students must take three of the following courses, which must be outside the student's major rubric. No more than two courses can be from any single discipline. (6-9 variable credits)

GDES 203 Introduction to Graphic Design (4)  
ART 203F Introduction to Photography (4)  
GDES 303 Typography (4)  
ART 303F Photography Studio (4)  
FILM 180 Understanding Movies (3)  
FILM 200 Technical Training: Beginning Filmmaking (1) and  
FILM 284 Beginning Filmmaking (3)  
FILM 290 Topics in Film (1-3)  
FILM 390 Topics in Film (1-3)  
ANIM 316 3D Animation (3)  
GCOM 355 Intermediate Computer Graphics (3)  
GCOM 366 Dreamweaver/CSS (3)  
EIT 261 Legal and Ethical Issues in Entertainment (3)  
EIT 281 Studio and Live Productions (2)  
THTR 234 Theatrical Design Principles (3)

### **School of Nursing and Healthcare Leadership**

**School of Nursing and Healthcare Leadership**

**Lommen Hall 213, (218) 477-2693**

**Chair: Barbara Matthees**

**Faculty:** Barbara Matthees, Carol Roth, Rebecca Rudel, Brandi Sillerud, Jitendra Singh, Nancy Stock, Alicia Swanson, Tracy Wright

The School of Nursing and Healthcare Leadership prepares undergraduate and graduate students in nursing and/or healthcare administration for life-long learning, caring service, leadership, and global citizenship. With an interdisciplinary approach in programming, students tackle real-world issues from a variety of viewpoints. Faculty members provide dynamic and comprehensive curricula that focus on current issues in the expanding areas of healthcare. Students in each major develop the skills and abilities essential to support careers as leaders in healthcare.

To accomplish this, the SNHL offers two undergraduate/baccalaureate majors: the **RN-to-BSN completion** program (RN-BSN) and **Health Services Administration** (HSAD, major or minor; also long term care emphasis option). The SNHL also offers master's degrees in nursing (with two emphases) and healthcare administration (MHA) (see graduate bulletin).

The RN to BSN program provides baccalaureate nursing education that prepares professional nurses for life-long learning, caring service, and global citizenship. The program provides the BSN pathway for career advancement of RNs who have already completed an Associate's degree in nursing. The coursework is totally online with clinical/practicum experiences in the student's geographic area if possible. Students enroll in one to three courses per semester, as it fits with their life situation.

The Health Services Administration program develops future leaders of healthcare in all realms to transform healthcare across the life and care delivery spectrum to best serve the needs of a changing world. Students complete the liberal studies requirements and courses specific to business and healthcare topics. The final internship provides students with a solid experience immediately prior to graduation.

The long term care emphasis within Health Services Administration is approved by the Minnesota Board of Examiners for Nursing Home Administrators (BENHA). The RN to BSN baccalaureate program is approved by the Higher Learning Commission (HLC) for full online delivery.

The baccalaureate degree in Nursing and Master's Nursing program at MSUM are accredited by the Commission on Collegiate Nursing Education, One Dupont Circle NW, Suite 530, Washington, D.C. 20036. More information on all programs can be found at: [SNHL website](#) or by contacting the SNHL office @ 218-477-2693.

## **RN-BSN**

MSUM's online baccalaureate degree in nursing is a pathway for career advancement of RNs who have already completed an Associate's degree in nursing. The coursework is totally online with clinical/practicum experiences (e.g., Public Health and Pathways/Capstone course) arranged in an area close to the student's residence, as possible (for out-of-MN students, enrollment may depend on the state board of education approvals). The program plan and online option offers students the opportunity to study at their own pace and any time, day or night. The RN-BSN curriculum is informed by professional standards and with input from employers, industry and nursing experts. The program has decades of strong history and is taught by faculty who know the students and appreciate the RN base from where students begin.

Admission to the RN-BSN program is competitive and is outlined on the program webpage <https://www.mnstate.edu/snhl/bsnadmission.aspx>

Applicants to the RN-BSN program must be licensed RNs or eligible for licensure by RN-BSN program start.

A majority of qualified applicants have an overall GPA greater than 2.75; however applications will be evaluated holistically on a number of criteria. Please see website link listed above for further details on the program admission criteria as well as application requirements, procedures, and deadlines.

*Graduates of the MSUM RN-BSN program will be able to:*

- Integrate concepts from the arts, humanities and sciences as the basis for critical thinking and decision making in the art and science of nursing.
- Recognize the role of nursing leadership to promote safe, high quality care with a focus on continual evaluation and improvement within a variety of organizations and systems.
- Identify, evaluate, and synthesize evidence to improve healthcare safety, quality, and outcomes.
- Utilize technology and information systems to communicate, manage information, and support decision making to improve patient outcomes within healthcare delivery systems.
- Understand the impact of healthcare policy, finance, reimbursement, and regulatory environments on the structure and function of the healthcare system.
- Communicate clearly and collaborate effectively to promote high quality and safe patient care.
- Utilize prevention at all levels to promote wellness and disease prevention for individuals, families, communities and diverse populations.
- Demonstrate professional values through commitment to ethical practice, ongoing learning and professional development.
- Practice caring, competent, holistic, patient centered nursing with diverse groups in a variety of settings across the lifespan.

#### Core Requirements (31 credits)

NURS 301 Transitions (4)

NURS 303L Family Health Nursing (4)

NURS 342 Care of Diverse Populations (2)

NURS 348L Public Health Nursing (4)

NURS 370 Nursing Research and Evidence-based Practice (4)

NURS 420L Gerontological Nursing to Promote Successful Aging (3)

NURS 450 Applied Pathophysiology (4)

NURS 472 Leadership and Professional Development (3)

NURS 473L Professional Pathways (3)

NOTE: "L" denotes courses with lab/clinical, or practica elements to the course.

#### Program Requirements

Graduates of the RN-BSN program will have a minimum of 120 total credits, including key transfer credits. There are 31 core required MSUM nursing credits in the RN-BSN program (listed above). There is also a requirement for a total of 40 upper division credits (300-400 level courses) for a baccalaureate degree from MSUM. Further, MSUM requires completion general education credits in the Liberal Arts and Sciences Curriculum (LASC) for all baccalaureate degree graduates.

There are generous transfer credit considerations for those with Associates' of Arts degrees (e.g., for those coming from the MN Transfer system, or from programs with Articulation agreements with MSUM, etc). Transcripts are evaluated individually to determine the extent of transfer credit awarded.

## **Accreditation**

The baccalaureate degree program in nursing and master's degree program in nursing at Minnesota State University Moorhead are accredited by the Commission on Collegiate Nursing Education (<http://www.ccneaccreditation.org>).

## **Health Services Administration**

MSUM offers an on-campus/hybrid Bachelor of Science in Health Services Administration program aimed at developing competencies in the field of health services administration. The program serves a variety of students including traditional students seeking a four year undergraduate degree, students who plan to take the Nursing Home Administrator examination to practice in Minnesota, and students seeking coursework to gain expertise in the broad field of health services administration.

To receive the B.S. in Health Services Administration, the student must meet the minimum university requirements and specific requirements for the program. The program is designed to prepare students to take a variety of positions in acute care organizations, clinics, long-term care, government and community health organizations. The program has been approved by the Board of Examiners for Nursing Home Administrators in Minnesota (BENHA) and North Dakota Long Term Care Administration. It also meets the licensure requirements. Additionally, program is also a member of Association of University Programs in Health Administration (AUPHA).

## **Mission**

The mission of the health services administration program is to prepare students for leadership positions in various healthcare settings. Our graduates are exposed to academic and experiential learning opportunities allowing them to explore the confluence of theory and practice.

## **Vision**

The vision of the health services administration program is to transform students into culturally competent, innovative leaders who are prepared to serve in various positions in healthcare.

## **Values**

- **Excellence** - the program sets the high standard for academic excellence by providing students an in-depth knowledge of the field of health administration. Partnership with industry leaders and experiential learning opportunities allow students to build administrative and functional skills needed to work in a variety of healthcare industry.
- **Collaboration and Teamwork** - the program strives to offer a curriculum that emphasizes the importance of interprofessional collaboration and teamwork between students, faculty members, graduates of the program and leaders in the healthcare industry.
- **Diversity** - the program guides the students in understanding and developing respect for people from all backgrounds, cultures, and experiences.
- **Continuous Improvement** - the program fosters a culture of continuous improvement to enhance student learning and development. The focus on continuous improvement guides exceptional educational opportunities to our traditional, non-traditional, and working students.
- **Lifelong Learning** - the program encourages lifelong learning by providing opportunities that allow students to enhance their professional competencies and administrative capabilities.

## **Student Learning Outcomes**

- Attain an academic and practical understanding of health services administration based on acquired knowledge of the principles of healthcare finance, management, strategic planning, policy and law.

- Identify the historical, political, and scientific foundations of health services management.
- Understand the legal and ethical basis of professional behavior.
- Exhibit leadership skills necessary for employment in a health care organization.
- Demonstrate the ability to communicate effectively in a clear, concise and professional manner both written and verbally.
- Acquire the ability to problem solve, plan and analyze at the leadership level necessary for employment in the healthcare industry.
- Long term care students will demonstrate the knowledge and skills necessary for licensure as defined by the Minnesota Board of Nursing Home Administrators (for student specializing in Long Term Care).

#### Core Requirements (41-44 credits)

HSAD 218 Introduction to Healthcare and Global Health (3)  
 HSAD 326 Epidemiology & Introductory Biostatistics (3)  
 HSAD 350 Evidence-based Program Planning and Research Methods (3)  
 HSAD 400 Aging in United States: Introduction to Gerontology and Senior Support Care (3)  
 HSAD 403 Health Informatics (3)  
 HSAD 414 Healthcare Strategic Planning and Marketing (3)  
 HSAD 416 Healthcare Leadership and Management (4)  
 HSAD 417 Quality Management in Healthcare (3)  
 HSAD 418 Healthcare Law and Ethics (3)  
 HSAD 419 Healthcare Finance and Reimbursement Methods (3)  
 HSAD 420 Health Policy and Economics (3)  
 HSAD 468 Internship Seminar (1)  
 HSAD 469 Internship (3-6)  
 OM 380 Methods Improvement (3)

#### Related Requirements (21 credits)

ACCT 230 Principles of Accounting I (3)  
 HSAD 422 Regulatory Management in Healthcare (3)  
 MGMT 440 Human Resource Management (3)  
 MGMT 451 Organizational Behavior (3) **OR**  
 PMGT 385 Process Leadership (3)  
 MKTG 270 Principles of Marketing (3)  
 PMGT 300 Project Management & Scheduling (3)  
 PHIL 318 Professional Ethics (3)

#### Long Term Care Administration Emphasis (6 credits)

NURS 420L (3) Gerontological Nursing to Promote Successful Aging (3)  
 HSAD 421 Long Term Care Administration (3)

#### **Minor in Health Services Administration – 22 credits**

ACCT 230 Principles of Accounting I (3)  
 HSAD 414 Healthcare Strategic Planning & Marketing (3)  
 HSAD 416 Healthcare Leadership & Management (4)  
 HSAD 418 Healthcare Law & Ethics (3)  
 HSAD 419 Healthcare Finance & Reimbursement Methods (3)

MGMT 260 Principles of Management (3)  
MGMT 440 Human Resource Management (3)

### **Certificate in Long Term Care Administration – 18 credits**

The Certificate in Long Term Care Administration expands the student's understanding of senior support services; legal, ethical and financial implications; leadership strategies; and design of living environments for aging populations.

Healthcare experience preferred

Upon completion of the Certificate in Long Term Care Administration, the student will:

- Describe leadership and organizational management strategies needed to work in long-term care settings.
- Describe the needs of the aging populations and resources available to them.
- Demonstrate concepts of fiscal resource allocation and information systems specific to senior support services.
- Describe performance improvement initiatives used in long-term care settings to improve quality, safety, and efficiency of resident services.
- Describe federal and state laws, rules, and regulations as they apply to long-term care settings.

HSAD 400 Aging in the United States: Introduction to Gerontology and Senior Support Care (3)

HSAD 403 Health Informatics (3)

HSAD 417 Quality Management in Healthcare (3)

HSAD 419 Healthcare Finance and Reimbursement Methods (3)

HSAD 421 Long Term Care Administration (3)

HSAD 422 Regulatory Methods in Health Care (3)

### **School of Performing Arts**

**School of Performing Arts-Music, Theatre, and Dance**

**Roland Dille Center for the Arts 102, (218) 477-2101**

**Chairs:** Monte Grise and Craig Ellingson

**Director of Theatre:** Craig Ellingson

**Faculty:** Laurie Blunsom, Patrick Carriere, Allen Carter, Jenny Dufault, Ricky Greenwell, Monte Grise, Ryan Jackson, Michael Krajewski, Terrie Manno, Erynn Millard, Tom Strait, Kenyon Williams

**Staff:** Elizabeth Evert-Karnes, James Stenger

### **Music Degree Programs**

The **Bachelor of Arts in Music** is designed for the student who seeks a general focus on music within a broadly based liberal arts framework. It is a flexible degree allowing a variety of interest concentrations. It is sometimes combined with a major in another area such as English, History, or Psychology.

The **Bachelor of Science in Commercial Music** covers its content area through performance, composition and theoretical study as well as related areas such as music business and technology.

The **Bachelor of Science in Music Education** is designed for the student who will pursue a career in public school teaching. Students specialize in vocal or instrumental music education.

## **New Students**

Students entering a major program in music should show a strong sensitivity to music and have a desire to communicate it to others. Entering students are assumed to have acquired basic music reading ability and performance experience in school groups and/or as soloists. Those lacking such background may have to complete additional preparation, which may extend the time for program completion and graduation.

## **Transfer Students**

Students transferring from music programs in other institutions will be evaluated upon entrance for advanced placement in their chosen degree program.

## **PERFORMANCE AND PROFICIENCY REQUIREMENTS**

### **Primary Performance Medium**

All music major programs require students to choose a primary performance medium. The number of required credits of performance study with this medium and the level of proficiency to attain varies with each program. All music majors will be enrolled in lessons on their instrument/voice every semester they are in residence with the following exceptions:

- Music Education majors must complete their recital requirement before student teaching.
- All students must enroll for lessons in the semester they do a recital even if all lesson requirements have been met.

### **Piano Requirements**

All major programs have a requirement for piano study. The number of required credits and level of proficiency to attain varies with each program. Upon entry to the music program, students are evaluated and placed in a piano course appropriate to their skill level. Credits for Class Piano I and II (MUS 150A and MUS 150B) do not count as piano performance study. Credits for Class Piano III and IV (MUS 150C and MUS 150D and MUS 151) are counted toward piano performance requirements.

### **Piano Proficiency**

All Bachelor of Science in Music Education students are required to pass a piano proficiency examination demonstrating prescribed keyboard skills. These examinations are offered at the end of each semester. Students usually take the exam after two years of piano performance study. Bachelor of Science in Commercial Music majors must pass MUS 151 (Basic Commercial Keyboard) in fulfillment of the piano proficient requirements. Bachelor of Arts majors must pass a piano proficiency exam if piano is their primary instrument. Students should see the Piano Proficiency Handbook for more information on piano proficiency requirements.

### **Guitar Proficiency**

All Music Education majors are required to pass a proficiency exam demonstrating basic guitar techniques. Successful completion of the course MUS 117, Guitar for Non-Majors, will satisfy the proficiency. Students with prior guitar experience may wish to be tested individually and be exempt from the class requirement.

### **Upper-Level Performance Study**

Performance and composition study areas indicate levels of proficiency through the course numbers. The 100 and 200 levels are lower-division courses; the 300 and 400 levels are upper-division courses and indicate advanced skills and knowledge of repertoire. The course levels do not necessarily correspond with the year of

enrollment. The Performance Study instructors have guidelines suggesting appropriate literature and skills for each level.

Advancement to the upper-division level is required for students in the Bachelor of Science in Music - Performance emphasis and Music Education programs and must be attained prior to presenting any recital required by the program. Enrollment in upper-division levels is allowed after a jury evaluation and recommendation. These evaluations take place at specified times each semester. Performance majors usually apply for upper-division level after fall semester of the sophomore year. Music Education majors normally apply after spring semester of the sophomore year. The jury may deny advancement to upper-division level and recommend further study after which the student may reapply for upper-division status.

### **Recitals**

Bachelor of Science Music Education majors are required to present a half recital in their primary performance area normally given during the student's senior year. Bachelor of Arts in Music Performance are required to present a full recital, normally given during the student's senior year. All recitals are prepared with the help of the applied instructor. Procedures for presenting recitals are available in the Music Department Office.

### **Differential Tuition**

Differential tuition is charged for all music courses, except for Liberal Arts and Sciences Curriculum courses. This is in addition to the normal tuition fee.

### **Ensemble Participation**

It is assumed that all music majors will participate in an ensemble every semester until all the requirements for their music program have been completed.

### **Grade Policy**

Students must earn a grade of "C-" or better in any course which is a part of the required curriculum for their major program including the related requirements that are not music courses.

Students earning a grade of D+ or lower in MUS 107A (Music Theory I) are required to enroll for MUS 110 (Musicianship) in the subsequent spring semester, should they wish to remain music majors. Upon successful completion of MUS 110 (C- or better), students may recommence their core coursework by retaking MUS 107A the following fall semester.

### **Concert Attendance Requirement**

All full-time music majors are required to attend a certain number of concerts, recitals, and departmental events per semester.

### **Theatre Arts**

The Minnesota State University Moorhead Theatre Arts is dedicated to two primary goals. The first is to provide our students with high-caliber training in theatre that prepares them to create theatre of any kind at any level. The second is to provide the Red River Valley area with a multifaceted, high-quality theatrical experience. These goals interweave to provide entertainment and education to those on both sides of the curtain.

Theatre Arts at MSUM is production oriented with students involved in construction, costuming, lighting, sound, and make-up, as well as performing, stage directing, and publicity. Students may pursue one or more emphases including Acting, Musical Theatre, Dance, and Theatre Technology and Design.



The faculty and students in Theatre Arts are linked together by a common focus on the creation and analysis of messages that powerfully affect their chosen audience. Theatre Arts provides a challenging, contemporary, relevant curriculum within the context of the liberal arts that prepares our graduates to become contributing and ethical citizens in a diverse, global community. We promote creativity, critical thinking, and lifelong discovery through courses that integrate theory and history with practice and application.

### **B.F.A. Degree in Acting**

The Bachelor of Fine Arts in Acting is a course of intense study in performance coupled with extensive practical experience. It is intended for students who plan to pursue a career in performance. Admittance to this program is through audition only. Auditions are open to incoming and current students.

Admission is through audition only. Once students are admitted, there will be a yearly evaluation to determine if the student remains in the program.

#### **Student Learning Outcomes**

- Demonstrate technical and artistic proficiency in acting, voice and speech, and movement.
- Demonstrate proficiency in a variety of styles of performance.
- Demonstrate technical and artistic proficiency through successful performance in a variety of theatrical productions.
- Attain a sufficient level of skill to be ready for employment in the field of acting.
- Demonstrate proficiency in modes of critical and historical inquiry necessary for the exploration of character and for a broad understanding of the history and aesthetics of theatre.

#### **Core Requirements (32 credits)**

8 credits of Theatre Activity (THTR X02 and) must be taken.

THTR 102 Theatre Activity: Technical (at least 2 credits)

THTR 202/THTR 302/THTR 402 Advanced Theatre Activity (at least 4 credits)

THTR 140 Dance for the Stage I (2)

THTR 196 First Year Seminar (1)

THTR 221 Introduction to Dramatic and Theatrical Analysis (3)

THTR 230 Acting I: Principles (3)

THTR 232 Principles of Make-Up for Stage and Film (2)

THTR 234 Theatrical Design Principles (3)

THTR 235 Directing I: Principles (3)

THTR 255 Stagecraft (3)

THTR 322 Survey of Western Theatre History and Drama (3)

THTR 492 Professional Seminar (1)

#### **Program Requirements (46 credits)**

#### **Intermediate Performance Studies (15 credits)**

THTR 231 Auditioning (3)

THTR 240 Dance for Stage II (3)

THTR 331 Acting II: Scene Study (3)

THTR 333 Movement for the Actor (3)

THTR 334 Voice for the Actor (3)

THTR 440 Dance Prod. (1)

**Acting Styles for (12 Credits to be repeated 4 times under different topics)**

THTR 430: Acro/Clown/Combat (3)

THTR 430: Diction and Dialects (3)

THTR 430: Musical Theatre Acting (3)

THTR 430: Musical Theatre Acting II (3)

THTR 430: Period Styles (3)

THTR 430: Performing Shakespeare (3)

**Advanced Performance Studies (9 credits)**

THTR 434: Special Projects –Movement (3)

THTR 434: Special Projects – Voice (3)

THTR 434: Special Projects – Advanced Realism (3)

**Advanced Performance Production (7 credits)**

THTR 360: Dramatic Production I Or THTR 397: Ind. Study – Junior Solo Performance (3)

THTR 460: Dramatic Production II Or THTR 497: Ind. Study – Senior Solo Performance (3)

THTR 497: Ind. Study – Audition Showcase (1)

**Advanced Theatre Studies (3 Credits – Choose 1)**

THTR 420: Theatrical World (3)

THTR 425: Contemporary Playwrights (3)

**B.S. Degree in Commercial Music**

A degree designed to prepare individuals for careers in the commercial/jazz/popular music industries as performers and composers/arrangers while also developing skills in the areas of live/recorded sound and music business/law.

**Student Learning Outcomes**

- Students will have the ability to apply concepts of 7th, 9th, 11th, and 13th chords and chord/scale relationships to their instruments.
- Students will be able to improvise at a beginning level to common basic forms in a commercial/jazz context.
- Students will have the ability to correctly score a lead sheet out for two instruments and a rhythm section.
- Students will learn transcription skills by transcribing a solo from an important jazz recording.
- Students will have the ability to write in 4 parts for instruments or voices in a commercial/jazz context.
- Students will be able to create interesting 5 part arrangements based on the 4 part examples.
- Students will develop basic concepts of writing for the big band.
- Students will discover how to integrate strings and voices in commercial/jazz styles.
- Students will learn melodic (rather than chord/scale) approaches to improvisation.
- Students will develop the ability to create meaningful melodic lines by utilizing guide-tone techniques.
- Students will work with increasingly chromatic (altered) chord structures.
- Students will learn the “language” of Bebop.
- Students will develop skills in the areas of both live and studio sound reinforcement and recording.
- Students will learn business aspects of the music industry and entertainment law.

- Students will complete prior to graduation a Capstone project showing all of these skills. This project will, in the majority of cases, involve the production of a studio recording of their work as performers/arrangers that they will also produce.

#### Core Requirements (27 credits)

Must earn a grade of C- or higher in all core coursework.

MUS 107A Music Theory I (3)  
 MUS 107B Aural Skills I (1)  
 MUS 108A Music Theory II (3)  
 MUS 108B Aural Skills II (1)  
 MUS 207A Music Theory III (3)  
 MUS 207B Aural Skills III (1)  
 MUS 208 Theory & Ear Training IV (2)  
 MUS 300 Basic Conducting (2)  
 MUS 303 History of Western Music to 1750 (3)  
 MUS 304 History of Western Music since 1750 (3)  
 MUS 316 World Music Survey (3)  
 MUS 374 Instrumental/Choral Arranging (2)

#### Program Requirements (28 credits)

MUS 150C Class Piano III (1)  
 MUS 151 Commercial Keyboard (1)  
 MUS 287 Commercial/Jazz Theory (3)  
 MUS 387 Commercial/Jazz Improvisation (3)  
 MUS 372 Commercial/Jazz Arranging (3)  
 MUS 492 Capstone Project (1)

8 credits of Applied Lessons on Primary Instrument.

8 credits of Ensembles: (8)  
 MUS 328 Ensemble

#### Related Requirements (8 credits)

EIT 182 Intro to Audio Recording (2)  
 EIT 161 Intro to Copyright and Trademark Law (3)  
 EIT 461 Entertainment Entrepreneurship (3)

#### Restricted Electives (20 credits)

Choose one of the following courses:

MUS 215 History of Jazz (3)  
 MUS 217 Pop/Rock Music for Non-Majors (3)  
 MUS 240 American Music (3)

Electives will be chosen in close consultation with the advisor and are to be classes outside of the music department. Up to four (4) credits of music (MUS rubric) coursework may be allowed as elective credit. Additional ensemble credit cannot be counted toward those four credits, only additional classes and lessons. 17 total elective credits.

## **B.A. Degree in Music**

To receive the B.A. Degree in Music, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Demonstrate a sufficient level of technique in their primary performance medium to artistically perform standard undergraduate level repertoire.
- Understand the common elements and organizational patterns in music to demonstrate knowledge of forms, processes, structure, context, and styles including diverse cultural sources, from historical and theoretical perspectives.
- Show competency in secondary performing areas including piano and conducting.
- Complete a capstone writing project in music.

### **Core Requirements (27 credits)**

MUS 107A Music Theory I (3)

MUS 107B Aural Skills I (1)

MUS 108A Music Theory II (3)

MUS 108B Aural Skills II (1)

MUS 207A Music Theory III (3)

MUS 207B Aural Skills III (1)

MUS 208 Music Theory IV (2)

MUS 300 Basic Conducting (2)

MUS 303 History of Western Music to 1750 (3)

MUS 304 History of Western Music since 1750 (3)

MUS 316 World Music Survey (3)

MUS 374 Instrumental/Choral Arranging (2)

### **Related Requirements (26 credits)**

Students must earn at least 26 credits in courses in addition to the requirements of the MSUM Liberal Arts and Sciences Curriculum and the previously listed BA requirements and electives. Acceptable courses are those with a liberal arts focus, and/or extra LASC courses. Courses with the MUS rubric may not be used to complete this requirement.

## **General Music Emphasis**

### **Program Requirements (19 credits)**

- Performance study on primary instrument: 8 credits, with 4 credits at the 200 level or above.
- Ensemble performance: 8 credits
- Piano Study: 2 credits of applied piano performance or Class piano III and IV
- MUS 492 Senior Thesis (1)
- A piano proficiency exam is required for students studying piano as their primary instrument.

### **Related Requirements (6 credits)**

Students must complete 6 credits from the list below:

MUS 240 American Music (3)

MUS 215 History of Jazz (3)

MUS 217 Pop/Rock Music (3)  
MUS 345 Women in Musical Culture (3)  
MUS 346 Sex, Sexuality and Music (3)  
EIT 261 Legal and Ethical Issues in Music (3)  
THTR 324 Musical Theatre History (3)

### **Music Performance Emphasis**

#### **Program Requirements**

- Performance study on primary instrument: 12 credits, with at least 4 credits at the 300 level or higher
- Ensemble related to primary instrument: 8 credits
- Piano (if not primary instrument): 4 credits of piano performance, which may include Class Piano III and IV.
- If piano is the primary instrument: 4 credits of applied study on a secondary instrument
- MUS 450: Senior Recital (1)
- A piano proficiency exam is required for students studying piano as their primary instrument.

### **B.S. Degree in Music Education**

The Bachelor of Science in Music Education (emphasis in instrumental education or emphasis in vocal education) prepares students for Minnesota licensure in K-12 Music Education – Instrumental or K-12 Music Education - Vocal. Students interested in obtaining licensure to teach K-12 Music Education must be admitted to the Teacher Education program and satisfy all Selective Admission and Retention in Teacher Education (SARTE) requirements, which are listed at <https://www.mnstate.edu/education/sarte.aspx>. Admission to the MSUM Teacher Education program ensures that candidates meet specific requirements to enable Minnesota Teacher License application at graduation. The Teacher Education requirements for licensure include professional education courses that are in addition to the specific music program requirements for the BS in Music Education. Completion of 136 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits) and K-12 Teaching Licensure Education requirements (36 credits).

#### **Student Learning Outcomes**

- Demonstrate a sufficient level of technique in their primary performance medium to artistically perform standard undergraduate level repertoire.
- Understand the common elements and organizational patterns in music to demonstrate knowledge of forms, processes, structure, context, and styles including diverse cultural sources, from historical and theoretical perspectives.
- Show competency in secondary performing areas including piano and conducting.
- Complete a capstone writing project in music.
- Demonstrate the ability to teach in a school music classroom.

#### **Core Requirements (63 credits)**

Students must select an emphasis in either Instrumental Music Education or Vocal Music Education.

MUS 107A Music Theory I (3)  
MUS 107B Aural Skills I (1)  
MUS 108A Music Theory II (3)  
MUS 108B Aural Skills II (1)  
MUS 207A Music Theory III (3)  
MUS 207B Aural Skills III (1)  
MUS 208 Music Theory IV (2)

MUS 300 Basic Conducting (2)  
MUS 303 History of Western Music to 1750 (3)  
MUS 304 History of Western Music since 1750 (3)  
MUS 316 World Music Survey (3)  
MUS 374 Instrumental/Choral Arranging (2)  
**Total: 27 credits**

Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)  
COMM 100 Speech Communication (3)  
ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
ED 498 The Professional Teacher in the Classroom (3)  
ED 448 Reading Study Skills in the Content Areas (3)  
ED 461S Student Teaching: Secondary (12) **or**  
ED 460S Student Teaching: Secondary (6) **and**  
EECE 480E Student Teaching: Elementary (6) **or**  
ED 461V Student Teaching: Secondary/K-12 (12)  
SPED 225 Individuals with Exceptionalities (3)  
**Total: 36 credits**

**Instrumental Music Emphasis (42 credits)**

Students in this major must pass piano and guitar proficiency exams and present a recital.

A student teaching qualifying exam, taken the semester prior to application to student teaching, must be passed before a student teaching assignment is arranged. Due to the student teaching internship and state-mandated licensure components for this degree, there are more credits required than the 120 ordinarily needed for a Bachelor's of Science degree. Usually students will need one semester beyond four years or enrollment in one or more summer sessions to complete this degree.

In addition to the courses listed below, students must earn:

Twelve (12) credits of performance study on the principal instrument, 2 of which must be at the 300 level or above

Two (2) credits of piano performance study which may include Class Piano III and/or IV

Seven (7) credits of instrumental ensemble, 2 credits minimum for large ensembles and 2 credits minimum for small ensembles

Students must also participate in at least one semester of a choral ensemble.

MUS 117 Guitar for Non-Majors (1)  
MUS 152 Class Voice (1)  
MUS 231 Methods for Teaching Woodwinds I (1)  
MUS 232 Methods for Teaching Woodwinds II (1)  
MUS 233 Methods for Teaching Brass Instruments (1)  
MUS 234 Methods for Teaching String Instruments (1)

MUS 235 Methods for Teaching Percussion (1)  
MUS 240 American Music (3)  
MUS 333 Teaching General Music K-12 (3)  
MUS 335 Secondary School Instrumental Methods and Literature (3)  
MUS 378 Advanced Conducting (3)  
MUS 450 Student Recital (1)

### **Vocal Music Emphasis (42 credits)**

Students in this major must pass piano and guitar proficiency exams and present a recital.

A student teaching qualifying exam, taken the semester prior to application to student teaching, must be passed before a student teaching assignment is arranged. Due to the student teaching internship and state-mandated licensure components for this degree, there are more credits required than the 128 ordinarily needed for a Bachelor's of Science degree. Usually students will need one semester beyond four years or enrollment in one or more summer sessions to complete this degree.

In addition to the courses listed below, students must earn:

Twelve (12) credits of voice performance study, 2 of which must be at the 300 level or above

Four (4) credits of piano performance study which may include Class Piano III and/or IV

Seven (7) credits of vocal ensemble

Students must enroll for one credit of vocal performance study each semester that they have full-time status, and register for two credits during the semester that they perform their recital. Students must participate in a vocal ensemble each semester that they have full-time status, with the exception of the semester in which they do their student teaching.

MUS 191 Diction (2)  
MUS 117 Guitar for Non-Majors (1)  
MUS 240 American Music (3)  
MUS 333 Teaching General Music K-12 (3)  
MUS 334 Secondary School Choral Methods and Literature (3)  
MUS 378 Advanced Conducting (3)  
MUS 432 Voice Pedagogy (3)  
MUS 450 Student Recital (1)

### **B.F.A. Degree in Musical Theatre**

The Bachelor of Fine Arts in Musical Theatre is a course of intense study in performance coupled with extensive practical experience. It is intended for students who plan to pursue a career in performance.

Admittance to this program is through audition only. Auditions are open to incoming and current students.

#### **Student Learning Outcomes**

- Demonstrate the ability to create characters convincingly and project one's self believably in word and action into imaginary circumstances of the musical.

- Demonstrate analytical and performance skills required in musicals and plays from various genres and style periods.
- Demonstrate advanced technical proficiency in voice and speech.
- Demonstrate the acquisition of advanced technical proficiency in movement.
- Comprehend of the basic business procedures of the actor's profession, including auditions, resumes and professional representation.
- Demonstrate advanced technical proficiency in singing, including vocal range, pitch, breath support and vocal styles.
- Demonstrate advanced technical proficiency in musicality, including skill in the understanding of written rhythm, written music and musical forms.

#### Core Requirements (32 credits)

8 credits of Theatre Activity (THTR X02 and) must be taken.

THTR 102 Theatre Activity: Technical (at least 2 credits)

THTR 202/THTR 302/THTR 402 Advanced Theatre Activity (at least 4 credits)

THTR 140 Dance for the Stage I (2)

THTR 196 First Year Seminar (1)

THTR 221 Introduction to Dramatic and Theatrical Analysis (3)

THTR 230 Acting I: Principles (3)

THTR 232 Principles of Make-Up for Stage and Film (2)

THTR 234 Theatrical Design Principles (3)

THTR 235 Directing I: Principles (3)

THTR 255 Stagecraft (3)

THTR 322 Survey of Western Theatre History and Drama (3)

THTR 492 Professional Seminar (1)

#### Program Requirements (48 credits)

##### **Theatre (28 credits)**

THTR 430 Acting Styles - Musical Theatre Acting I (3)

THTR 430 Acting Styles - Musical Theatre Acting II (3)

THTR 240 Dance for Stage II (2)

THTR 142 Tap I (2)

THTR 342 Tap II (2)

THTR 141 Ballet I (2)

THTR 341 Ballet II (2)

THTR 333 Movement for the Actor (3)

THTR 334 Voice for the Actor (3)

THTR 440 Dance Production (1) repeated 3 times

MUS 324/THTR 324 Musical Theatre History (3)

##### **Music (20 credits)**

MUS 150C Class Piano III (1)

MUS 107A Music Theory I (3)

MUS 107B Aural Skills I (1)

MUS 108A Music Theory II (3)

MUS 108B Aural Skills II (1)



MUS X54 Voice Lessons (6) repeated for a total of 6 credits. A minimum of 2-credits at the upper level MUS 328 Choir Ensemble, Musical Theatre Ensemble or Opera/Musical Theatre Workshop (1) A Minimum of 5 credits. At least 1 credit must be choir.

## **B.A. Degree in Theatre Arts**

To receive the B.A. Degree in Theatre Arts, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Students will demonstrate knowledge and understanding of theatre history, literature, and dramatic theory, and have an ability to communicate effectively about these topics.
- Students will demonstrate the ability to analyze, design and construct theatrical scenery, lighting, costumes, sound and props using appropriate tools and technology, and have an ability to effectively communicate about this process.
- Students will act in a variety of performance styles, and demonstrate the ability to communicate effectively their knowledge and understanding of this process.
- Students will direct for the theatre, and demonstrate the ability to effectively communicate their knowledge and understanding of this process.

### **Core Requirements (30 credits)**

The core is required of all students majoring in one of the Theatre Arts emphases: Acting, Musical Theatre or Theatre Technology and Design. A grade of “C-” or higher in THTR 496/THTR 492 is required for graduation. In addition to these requirements for a Theatre Arts degree, students must fulfill other university requirements. THTR 102 must be repeated for a total of 8 credits.

THTR 102 Theatre Activity (1)  
THTR 140 Dance for the Stage I (2)  
THTR 196 First Year Seminar (1)  
THTR 221 Introduction to Dramatic & Theatrical Analysis (3)  
THTR 230 Acting I: Principles (3)  
THTR 234 Theatrical Design Principles (3)  
THTR 235 Directing I: Principles (3)  
THTR 255 Stagecraft (3)  
THTR 322 Survey of Western Theatre History and Drama (3)  
THTR 492 Professional Seminar (1)

### **Acting Emphasis (20 credits)**

THTR 430 must be repeated three times for a total of 9 credits.

THTR 232 Principles of Make-up for Stage and Film (2)  
THTR 331 Acting II: Scene Study (3)  
THTR 333 Movement for the Actor (3)  
THTR 334 Voice for the Actor (3)  
THTR 430 Acting Styles (3)

### **Musical Theatre Emphasis (22 credits)**

Students must repeat THTR 440 Dance Production for a total of 2 credits.

MUS 107A Music Theory I (3)  
MUS 107B Aural Skills I (1)  
MUS 154A Music Performance: Voice (1)  
MUS 154B Music Performance: Voice (1)  
THTR 240 Dance for the Stage II (2)  
THTR 324 Musical Theatre History (3)  
THTR 333 Movement for the Actor (3)  
THTR 334 Voice for the Actor (3)  
THTR 430 Acting Styles: Acting for Musical Theatre (3)  
THTR 440 Dance Production (2)

**Theatre Technology and Design (21 credits)**

EIT 181 Audio Technology Theory (3)  
THTR 350 Costume Studio (3)  
THTR 356 Lighting Studio (3)  
THTR 431 Theater Design and Technical Styles (3)  
THTR 450 Scenic Studio (3)

Students must take six credits of additional theatre electives which are at the 300 level or higher.

**Minor in Commercial Music – 22 credits**

A program designed for focused study in the areas of performing, composing, and arranging music in commercial and jazz styles.

**Student Learning Outcomes**

- Students will develop performance skills specific to the commercial and jazz genres.
- Students will develop composition and arranging/orchestration skills specific to the commercial and jazz genres.

MUS 107A Music Theory I (3)  
MUS 107B Aural Skills I (1)  
MUS 287 Commercial/Jazz Theory (3)  
MUS 387 Commercial/Jazz Improvisation (3)  
MUS 372 Commercial/Jazz Arranging (3)  
MUS 15\* or 25\* Private Lessons (4) \*must repeat for 4 credits

Five (5) credits to be chosen from:

MUS 370 Composition (2)  
MUS 373 The Art and Craft of Popular Songwriting (3)  
MUS 328 Musical Ensembles (1) \*can be repeated

**Minor in Music – 24 credits**

In addition to the courses listed, students must earn four credits of ensemble and four credits of performance study, one of which must be at the 200 level or above. At least one credit of performance study, one credit of ensemble, and two credits from the required or elective credits listed below (or an approved substitute) must be taken at MSUM. Students studying piano at the 200 level must pass a piano proficiency exam.

MUS 110 Musicianship for Non-Majors (2)

MUS 111 The Art of Listening (3)

MUS 240 American Music (3)

Students must complete one of the courses listed. The remaining five credits can be chosen from any course with a MUS rubric.

MUS 215 History of Jazz (3)

MUS 217 Pop/Rock Music for Non-Majors (3)

MUS 316 World Music Survey (3)

### **Minor in Theatre Arts – 25 credits**

THTR 102 Theatre Activity (1) \*MUST BE TAKEN TWICE

THTR 140 Dance for the Stage I (2)

THTR 221 Drama I (3)

THTR 230 Acting I: Principles (3)

THTR 232 Principles of Makeup for Stage and Film (2)

THTR 235 Directing I: Principles (3)

THTR 255 Stagecraft (3)

Students must take seven credits in theatre electives which are at the 300 level or higher.

### **Minor in Theatre Dance – 23 credits**

THTR 140 Dance for the Stage I (2)

THTR 141 Ballet I (2)

THTR 142 Tap I (2)

THTR 324 Musical Theatre History (3)

THTR 333 Movement for the Actor (3)

THTR 340 Principles of Choreography (3)

THTR 440 Dance Production (1) \*MUST BE REPEATED FOR TOTAL OF 3 CREDITS

AT 220 Care and Prevention of Injuries and Illnesses (3)

MUS 110 Musicianship for Non-Majors (2)

### **Minor in Theatre Design & Technology – 25 credits**

The Minor in Design and Technology allows students with an interest in these theatre disciplines to complement their studies at the university with a more focused program than the general theatre minor.

#### **Student Learning Outcomes**

- Demonstrate a knowledge of basic theatre production techniques.
- Demonstrate the ability to work within the collaborative creative and professional production process.
- Demonstrate a knowledge of basic script analysis.
- Understand the fundamental vocabulary of the discipline.

THTR 102 Theatre Activity (1) \*MUST BE TAKEN TWICE

THTR 221 Drama I (3)

THTR 230 Acting I: Principles (3)

THTR 232 Principles of Makeup for Stage and Film (2)

THTR 234 Theatrical Design Principles (3)

THTR 235 Directing I: Principles (3)

THTR 255 Stagecraft (3)

Students must take six credits in theatre electives which are at the 300 level or higher.

### **Minor in Theatre Performance: Acting – 25 credits**

The minor in acting allows students with an interest in this theatre discipline to complement their studies at the university with a more focused program than the general theatre minor.

THTR 102 Theatre Activity (1) \*MUST BE TAKEN TWICE

THTR 140 Dance for the Stage I (2)

THTR 221 Drama I (3)

THTR 230 Acting I: Principles (3)

THTR 331 Acting II: Scene Study (3)

THTR 333 Movement for the Actor (3)

THTR 334 Voice for the Actor (3)

THTR 430 Acting Styles (3)\*MUST BE TAKEN TWICE

### **Minor in Theatre Performance: Musical Theatre – 24 credits**

The Minor in Musical Theatre allows students with an interest in this theatre discipline to complement their studies at the university with a more focused program than the general theatre minor.

#### **Student Learning Outcomes**

- Demonstrate a knowledge of basic theatre production techniques.
- Demonstrate the ability to work within the collaborative creative and professional production process.
- Demonstrate a knowledge of basic script analysis.
- Understand the fundamental vocabulary of the discipline.

THTR 102 Theatre Activity (1) \*MUST BE TAKEN TWICE

THTR 140 Dance for the Stage I (2)

THTR 221 Drama I (3)

THTR 230 Acting I: Principles (3)

THTR 240 Dance for the Stage II (2)

THTR 324 Musical Theatre History (3)

THTR 333 Movement for the Actor (3)

THTR 334 Voice for the Actor (3)

THTR 430 Acting Styles: Acting for Musical Theatre (3)

### **Certificate in Instrumental Music Education – 14 credits**

The Certificate in Instrumental Music Education is designed for Music Education students pursuing the BS in Vocal Music Education. The program allows students to receive additional training in Instrumental music and prepare for careers that require training in both vocal and instrumental music. This certificate does not lead to teaching licensure in instrumental music education.

MUS 231 Methods for Teaching Woodwinds I (1)

MUS 232 Methods for Teaching Woodwinds II (1)

MUS 233 Methods for Teaching Brass Instruments (1)

MUS 234 Methods for Teaching String Instruments (1)  
MUS 235 Methods for Teaching Percussion (1)  
MUS 335 Secondary School Instrumental Methods and Literature (3)  
MUS 15x-454x: Instrumental Lessons (1) – Must take 3 times  
MUS 328: Wind Ensemble (1) – Must take 3 times

### **Certificate in Jazz – 12 credits**

The Certificate in Jazz is designed for Music Education students preparing for careers in teaching. The program allows students to receive additional training in Jazz, to enhance their music education training, and prepare more comprehensively for duties often required in secondary school teaching.

Gain knowledge of and experience in jazz theory, arranging, notation, history, improvisation, styles, repertoire.

MUS 151 Basic Commercial Keyboard (1)  
MUS 287 Commercial/Jazz Theory (3)  
MUS 387 Commercial/Jazz Improvisation (3)  
MUS 372 Commercial/Jazz Arranging (3)  
MUS 328 Jazz Ensemble or Jazz Combo (1) \*MUST BE TAKEN TWICE

### **Certificate in Music Technology – 12 credits**

The Certificate in Music Technology is designed for Music Education students preparing for careers in teaching. The program allows students to receive additional training in music technology, to enhance their music education training, and prepare for integrating music technology into music curricula in K12 music programs.

Gain knowledge of and experience in basic principles of live and studio audio production, standard audio production technology, sound reinforcement systems, and sound reinforcement/recording techniques.

EIT 161 Copyright and Trademark (3)  
EIT 181 Audio Technology Theory (3)  
EIT 182 Introduction to Audio Recording (2)  
EIT 382 Live Sound Reinforcement/Recording (2)  
EIT 361 Entertainment Activity (1) – Must be taken twice

### **Certificate in Musical Theatre – 13 credits**

The Certificate in Musical Theatre is designed for students in Music Education preparing for teaching careers. The program allows students to receive additional training in Musical Theatre, to enhance their music education training, and prepare for ancillary duties often required in secondary school teaching.

Demonstrate knowledge of and experience in basic acting techniques, theatre vocabulary, dramatic works as theatrical production, and basic dance movements.

THTR 102 Theatre Activity (1) **MUST BE TAKEN TWICE**  
THTR 140 Dance for the Stage I (2)  
THTR 221 Drama I (3)  
THTR 230 Acting I: Principles (3)  
THTR 430 Acting Styles: Acting for Musical Theatre (3)

## **Certificate in Vocal Music Education – 14 credits**

The Certificate in Vocal Music Education is designed for Music Education students pursuing the BS in Instrumental Music Education. The program allows students to receive additional training in vocal music and prepare for careers that require training in both vocal and instrumental music. This certificate does not lead to teaching licensure in vocal music education.

MUS 334 Secondary School Choral Methods and Literature (3)

MUS 191 Diction (2)

MUS 432 Voice Pedagogy (3)

MUS 154-454: Voice Lessons (1) – Must take 3 times

MUS 328: Concert Choir, Men's Choir or Women's Choir (1) – Must take 3 times

## **School of Teaching and Learning**

### **Elementary & Early Childhood Education**

#### **School of Teaching and Learning**

**Lommen Hall 216, (218) 477-2216**

**Chair:** John Benson

Director of Field Experience and SARTE: Lynn Mahlum

Assistant Director of Field Experience: Lisa Staiger

**Faculty:** Deanna Borgeson, Abby Bremer, Layna Cole, Keri DeSutter, Erin Gillett, Marci Glessner, Lynn Johnson, Shirley Johnson, David Kupferman, Courtney LaLonde, Sheila Marquardt, Danielle Parenteau, Sun Ok Park, Valerie Ritland, Peggy Rittenhouse, Brian Smith, Ximena Suarez-Sousa

Additional information about education policies and degree requirements can be found under *Teacher Education*.

### **Areas of Study**

Early Childhood Education, Non-Licensure Early Childhood Education, Elementary Inclusive Education with the option of Special Education Licensure, and Graduate Education in Curriculum & Instruction and Special Education. Descriptions of the graduate programs and courses may be requested from the Office of Graduate Studies.

### **Elementary Inclusive and Early Childhood Admissions Requirements**

Student wishing to complete a major in Elementary Inclusive Education or Early Childhood Education must meet all the SARTE (Selective Admission and Retention in Teacher Education) requirements.

A minimum cumulative GPA of 2.8 is required. In addition to the GPA requirement, there are eight different items for which students are rated and receive points ranging from 0-4 per item. The eight items include the following:

- Cumulative GPA
- Grade earned in ED 205 (at least a C required)
- Grade earned in ED 294 (at least a C required)
- Grade earned in SPED 225 (at least a C required)
- Disposition concern by course instructor
- ED 205 Dispositions

- NES Basic Skills Tests or ACT + Writing/SAT test
- Personal Initiative

Students must earn 23 points or higher to be fully admitted into Teacher Education. If students score 20-22 points, they are not admitted into Teacher Education, but an automatic appeal will go to the T-Care Team. If students earn below 20 points, they are not admitted into Teacher Education, but have the right to appeal to the T-Care Team.

Please refer to the SARTE information and instructions, under *Teacher Education*, in this **Bulletin** for details. Full admittance to Teacher Education through SARTE requirements is required before students can enroll in 300 and 400 level courses with the education prefix of ED, EECE, SPED or STL. Students must have taken all three NES basic skills exams, or achieved a composite score of 22 or higher and a combined English/Writing score of 21 or higher on their ACT exam, before they can student teach and apply for licensure. Students must also take the appropriate MTLE licensure exams in both content and pedagogy before they may apply for Minnesota licensure. Students should consult with their advisor.

### **Non-Licensure Early Childhood Education Admission Requirements**

Students wishing to complete a major in Early Childhood Education Non-Licensure must meet the following requirements:

- Complete 45 semester credits
- GPA of 2.25 in LASC
- Overall GPA of 2.5
- Verification from supervisor of experience with groups of children in a teaching/learning setting.

### **Major in Elementary Inclusive Education**

This program prepares teachers to teach the wide range of diverse learners found in today's K-6 classrooms. The course of study emphasizes academic content knowledge, assessment of student needs, differentiated instruction, collaborative decision making, and an intentional emphasis on learning in field-based placements. Because the program prepares teachers for inclusive classrooms, with 30 additional credits it is possible to also pursue licensure in Special Education. The Elementary Inclusive Education degree prepares candidates to apply for a Minnesota teaching license in Elementary Education.

Continued adherence to the SARTE requirements, including a cumulative GPA of 2.8, is required for enrollment in any 300/400 level education course. Grades of C- or higher must be earned in all courses that are required for licensure, except ED 205, ED 294 and SPED 225, which require at least a grade of C.

### **Major in Early Childhood Education**

The Early Childhood Education major prepares students to teach in inclusive programs serving children from infancy to 8 years old. These programs include licensed childcare, preschool, Head Start, Early Childhood Family Education, public school kindergarten and first, second, and third grade classrooms. The Early Childhood Education major emphasizes collaboration with parents and other professional agencies that serve families with young children. This major prepares candidates to apply for a Minnesota teaching license in Early Childhood Education.

Continued adherence to the SARTE requirements, including a cumulative GPA of 2.8, is required for enrollment in any 300/400 level education course. Grades of C- or higher must be earned in all courses that are required for licensure, except ED 205, ED 294 and SPED 225, which require at least a grade of C.

## **Major in Non-Licensure Early Childhood Education**

The Early Childhood Education--Non-Licensure major prepares students to teach in inclusive education and care programs serving infants, toddlers, and preschool children and their families. Graduates are qualified to teach in licensed childcare and pre-school programs, Head Start and Early Head Start. The Early Childhood Education non-licensure major is designed to provide a strong foundation in understanding child development, developmentally appropriate practices, early literacy development, young children's learning, and current best practices in supporting young children and their families in a variety of settings.

## **B.A. Degree in Early Childhood Education Non-Licensure**

The Early Childhood Education Non-Licensure major prepares students to teach in inclusive education and care programs serving infants, toddlers, and preschool children and their families. Graduates are qualified to teach in licensed childcare and pre-school programs, Head Start and Early Head Start. The Early Childhood Education non-licensure major is designed to provide a strong foundation in understanding child development, developmentally appropriate practices, early literacy development, young children's learning, and current best practices in supporting young children and their families in a variety of settings. To receive the B.A. Degree in Early Childhood Education Non-Licensure, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or above is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### Admission Requirements

Students wishing to complete a major in Early Childhood Education Non-Licensure must:

Complete 45 semester credits

GPA of 2.25 in LASC

Overall GPA of 2.50

Verification from supervisor of experience with groups of children in a teaching/learning setting

The following performance outcomes are based on the Minnesota State Board of Teaching (BOT) Standards and are aligned with the conceptual framework for the education unit. MSUM teacher candidates are becoming professionals who are knowledgeable, reflective, humanistic and creative who will:

- Demonstrate knowledge of content.
- Designs organized, effective, and appropriate lessons.
- Uses appropriate informal and/or formal assessment methods to evaluate.
- Demonstrate knowledge of human development through appropriate interaction activities and demeanor.
- Demonstrate competence in employing appropriate technology.
- Express ideas articulately in written and oral communication.
- Recognize individual differences and gives opportunities for diverse learners to learn.
- Foster a safe, compassionate and respectful educational environment that promotes learning.
- Guide student behavior effectively and appropriately.
- Solicit suggestions and feedback from others and is receptive to them.
- Analyze own performance and seeks sources of improvement.
- Plan creative lessons and units.
- Employ diverse teaching strategies.
- Maintain professional conduct as evidenced by punctuality, interaction with others, preparedness and initiative.



### Core Requirements (9 credits)

EECE 220 Foundations of Early Childhood/Early Childhood Special Education (3)  
EECE 250 Creative Expression in Early Childhood (3)  
STL 291 Early Literacy (3)

### Program Requirements (24 credits)

EECE 333 Discovery Learning (3)  
EECE 430 Infant/Toddler Programs and Practices (3)  
EECE 433 Preschool/Kindergarten Curriculum (3)  
EECE 437 Leadership and Administration in EC-WI (3)  
EECE 438 Guidance and Play (3)  
EECE 469 Early Childhood Internship (6-12)  
STL 341 Reading/Writing Methods P-3 (3)

### Restricted Electives (6 credits)

Students must earn six credits by taking courses from the following list:

STL 330 Child Development and Learning (3)  
STL 413 Effective Teaching (3)  
STL 428 Building Partnerships in Education (3)  
STL 441 Children's Literature (3)  
STL 442 Advanced Reading and Writing PreK-3 (3)  
MATH 302 Mathematics for Early Childhood (3)

## **B.S. Degree in Early Childhood Education**

The Early Childhood major prepares students to teach in inclusionary programs serving children from infancy to 8 years old. These programs include childcare, Head Start, and Early Childhood Family Education, as well as public school kindergarten and first, second, and third grade classrooms. The Early Childhood major emphasizes collaboration with parents and other professional agencies serving families with young children.

To receive the B.S. Degree in Early Childhood Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.75 GPA or above is required for this degree which includes the Liberal Arts and Sciences Core (42 credits) and Early Childhood Education requirements (36 credits). All coursework for this degree requires a grade of C- or higher.

### Admission Requirements

Admission into SARTE required (Selective Admission and Retention in Teacher Education).  
See "Teacher Education" for requirements.

The following performance outcomes are based on the Minnesota State Board of Teaching (BOT) Standards and are aligned with the conceptual framework for the education unit. MSUM teacher candidates are becoming professionals who are knowledgeable, reflective, humanistic and creative who will:

- Demonstrate knowledge of content.
- Designs organized, effective, and appropriate lessons.
- Uses appropriate informal and/or formal assessment methods to evaluate.
- Demonstrate knowledge of human development through appropriate interaction activities and demeanor.
- Demonstrate competence in employing appropriate technology.

- Express ideas articulately in written and oral communication.
- Recognize individual differences and gives opportunities for diverse learners to learn.
- Foster a safe, compassionate and respectful educational environment that promotes learning.
- Guide student behavior effectively and appropriately.
- Solicit suggestions and feedback from others and is receptive to them.
- Analyze own performance and seeks sources of improvement.
- Plan creative lessons and units.
- Employ diverse teaching strategies.
- Maintain professional conduct as evidenced by punctuality, interaction with others, preparedness and initiative.

#### Core Requirements (15 credits)

ED 205 Introduction to Education (3)

ED 294 Educational Psychology (3)

ED 310 Social Foundations of Education (3)

SPED 225 Individuals with Exceptionalities (3)

STL 291 Early Literacy (3)

#### Program Requirements (59 credits)

Students must earn at least 12 credits in EECE 481E.

EECE 220 Foundations of Early Childhood & Early Childhood Special Education (3)

EECE 250 Creative Expressions in Early Childhood (3)

EECE 333 Discovery Learning (3)

EECE 426 Primary Methods: Math, Science, Social Studies (3)

EECE 430 Infant/Toddler Programs and Practices (3)

EECE 433 Preschool and Kindergarten Curriculum (3)

EECE 437 Leadership and Administration in Early Childhood Education (3)

EECE 438 Guidance and Play (3)

EECE 441 Children's Literature: Content and Methods (4)

EECE 481C Student Teaching: Early Childhood (2)

EECE 481E Student Teaching: Kindergarten/Elementary (12-16)

HLTH 311 Health in the Elementary Schools (2)

STL 341 Reading and Writing Methods PreK-3 (3)

STL 388 Classroom Assessment (3)

STL 413 Effective Teaching (3)

STL 428 Building Partnerships (3)

STL 442 Advanced Reading and Writing Methods PreK-3 (3)

#### Related Requirements (12 credits)

AMCS 233 Education and Multicultural America (3)

COMM 100 Speech Communication (3)

ENGL 202 English Composition and Literature (3)

MATH 302 Mathematics for Early Childhood (3)

#### Restricted Electives (6 credits)

Students must complete two science courses from list below.

BIOL 370 Exploring Biology (3)  
GEOS 170 Earth Science Today (3)  
PSCI 170 Physical Science I (3)

## **B.S. Degree in Elementary Inclusive Education**

To receive the B.S. Degree in Elementary Inclusive Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 128 credits with a 2.75 GPA or higher is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits). A grade of C- or higher is required in all coursework for this degree.

### Admission Requirements

Selective Admission and Retention in Teacher Education (SARTE).

See "Teacher Education" for details or go to

<http://www.mnstate.edu/education/studentresources/sarte.aspx>

The following performance outcomes are based on the Minnesota State Board of Teaching (BOT) Standards and are aligned with the conceptual framework for the education unit. MSUM teacher candidates are becoming professionals who are knowledgeable, reflective, humanistic and creative who will:

- Demonstrate knowledge of content.
- Designs organized, effective, and appropriate lessons.
- Uses appropriate informal and/or formal assessment methods to evaluate.
- Demonstrate knowledge of human development through appropriate interaction activities and demeanor.
- Demonstrate competence in employing appropriate technology.
- Express ideas articulately in written and oral communication.
- Recognize individual differences and gives opportunities for diverse learners to learn.
- Foster a safe, compassionate and respectful educational environment that promotes learning.
- Guide student behavior effectively and appropriately.
- Solicit suggestions and feedback from others and is receptive to them.
- Analyze own performance and seeks sources of improvement.
- Plan creative lessons and units.
- Employ diverse teaching strategies.
- Maintain professional conduct as evidenced by punctuality, interaction with others, preparedness and initiative.

### Core Requirements (20 credits)

ED 205 Introduction to Education (3)  
ED 294 Educational Psychology (3)  
ED 310 Social Foundations of Education (3)  
SPED 225 Individuals with Exceptionalities (3)  
STL 291 Early Literacy (3)  
STL 327 Technology in Education (2)  
STL 330 Child Development and Learning for Teachers (3)

### Program Requirements (52 credits)

Students who choose not to add Special Education Licensure must complete at least 10 credits of STL 481E

Student Teaching: Elementary.

ART 350 Methods and Materials: Art for the Elementary Classroom (3)  
EECE 441 Children's Literature: Content and Methods (4)  
HLTH 311 Health in the Elementary Schools (2)  
MATH 406 Mathematics in the Elementary School (3)  
MUS 319 Music for Classroom Teachers (3)  
STL 226 Social Studies Content for Elementary Teachers (2)  
STL 341 Reading and Writing Methods PreK-3 (3)  
STL 388 Classroom Assessment (3)  
STL 413 Effective Teaching (3)  
STL 428 Building Partnerships (3)  
STL 442 Advanced Reading and Writing Methods PreK-3 (3)  
STL 443 Learning Environment (3)  
STL 474 Methods in Teaching Elementary Science and Environmental Education (3)  
STL 475 Teaching Reading and Writing Grades 4-6 (3)  
STL 476 Methods for Teaching Elementary Social Studies (3)  
STL 481E Student Teaching: Elementary (8-16)

Related Requirements (27 credits)

AMCS 233 Education and Multicultural America (3)  
BIOL 370 Exploring Biology (3)  
COMM 100 Speech Communication (3)  
ENGL 202 English Composition and Literature (3)  
GEOS 170 Earth Science Today (3)  
MATH 110 Introduction to Mathematics (3)  
MATH 303 Foundations of Number Systems (3)  
MATH 304 Informal Geometry (3)  
PSCI 170 Physical Science I (3)

Special Education Academic and Behavioral Strategist Option

SPED 402 Characteristics of Students with Mild Disabilities (3)  
SPED 403 Methods: Mild Disabilities (4)  
SPED 410 Methods and Strategies of Special Education Assessment (3)  
SPED 410L Special Education Lab (2)  
SPED 414 IEP Policies and Methods (2)  
SPED 468M ABS Middle/Secondary Competency Based Field Experience (6)  
SPED 470 Secondary Services and Transitional Planning (4)  
SPED 471 Behavioral and Environmental Management (3)  
SPED 480 Legal/Social Foundations of Special Education (3)

**Secondary & K-12 Education**

Teacher Education candidate responsibilities and licensure information can be found under Teacher Education.

**Areas of Study**

K-12 disciplines include Visual Arts, Music, Spanish, Physical Education, and TESL. Secondary Education

disciplines include the majors of Communication Arts and Literature, Chemistry, Health, Mathematics, Life Science, Earth Science, Physical Science, and Social Studies. For more information, please contact the department in charge of the specific content area (Visual Art, Music, etc.)

### **Secondary and K-12 Requirements**

Students interested in obtaining licensure to teach Secondary and K-12 Education must be admitted to the Teacher Education program and satisfy all Selective Admission and Retention in Teacher Education (SARTE) requirements.

### **Selective Admission and Retention in Teacher Education (SARTE) Requirements**

A minimum cumulative GPA of 2.5 is required. In addition to the GPA requirement, there are eight different items for which students are rated and receive points ranging from 0-4 per item. The eight items include the following:

- Cumulative GPA
- Grade earned in ED 205 (at least a C required)
- Grade earned in ED 294 (at least a C required)
- Grade earned in SPED 225 (at least a C required)
- Disposition concern by course instructor
- ED 205 Dispositions
- Basic Skills Testing
- Personal initiative

Students must earn 23 points or higher to be fully admitted into Teacher Education. If students score 20-22 points, they are not admitted into Teacher Education, but an automatic appeal will go to the T-Care Team. If students earn below 20 points, they are not admitted into Teacher Education, but have the right to appeal to the T-Care Team. Please refer to the SARTE information and instruction, under Teacher Education, in this Bulletin for details.

### **Minor in Special Education – 18 credits**

SPED 225 Individuals with Exceptionalities (3)

SPED 471 Behavior and Environment Management (3)

SPED 480 Legal/Social Foundations of Special Education (3)

Choose three courses from the following list:

EECE 220 Foundations of Early Childhood & Early Childhood Special Education (3)

SPED 402 Characteristics of Students with Mild Disabilities (3)

SPED 404 Best Practices in Teaching I (3)

SPED 413 Best Practices in Teaching II (3)

SPED 419 Biomedical Aspects of Physical and Health Disabilities (3)

SPED 430 Foundation of Reading and Writing Methods (3)

SPED 431 Survey of Autism Spectrum Disorders (2)

SPED 455 Characteristics of Students with Learning and Behavior Problems (4)

### **Special Education Optional Licensure**

This course sequence will qualify students to apply for a special education Academic Behavior Strategist K-12

Minnesota teaching license when completed in conjunction with another Secondary or K-12 education major (i.e., Communication Arts/Literature Education, Math Education, Art Education, etc.)

Students taking upper level education courses are required to meet Selective Admission and Retention Teacher Education (SARTE) requirements. Students will need to fulfill SARTE requirements and check point requirements as defined within their major program.

- Students will demonstrate skills related to special education teaching at the elementary, middle, and high school level.
- Students will demonstrate mastery of legal and due process requirements for evaluation, instructing, and serving students with identified special educational needs.
- Students will develop collaboration and communication skills necessary for working with parents of children with special needs and other professionals serving students with special needs.
- Students will demonstrate proficiency related to core special education licensure standards developed by the Minnesota Board of Teaching.
- Students will demonstrate proficiency related to the Academic Behavior Strategist (ABS) licensure standards developed by the Minnesota Board of Teaching.

SPED 225 Individuals with Exceptionalities (3)

SPED 402 Characteristics of Students with Mild Disabilities (3)

SPED 403 Methods: Mild Disabilities (4)

SPED 404 Best Practices in Teaching I (3)

SPED 410 Methods and Strategies of Special Education Assessment (3)

SPED 410L Special Education Lab (2)

SPED 414 IEP Policies and Methods (2)

SPED 430 Foundations of Reading and Writing Methods (3)

SPED 445 Methods of Reading Intervention (3)

SPED 470 Secondary Services and Transitional Planning (4)

SPED 471 Behavior and Environment Management (3)

SPED 480 Legal and Social Foundations of Special Education (3)

SPED 468M ABS Competency Based Field Experience/Student Teaching (6)

ED 498 The Professional Teacher in the Classroom (2)

MATH 303 Foundations of Number Systems (3)

MATH 402 Mathematics for Special Education (4)

## **Teacher Education**

Minnesota State University Moorhead's education programs are accredited by the Council for the Accreditation of Educator Preparation (CAEP) and meet the standards set by the Minnesota Board of Teaching.

### **MSUM's Education Programs**

Elementary Inclusive Education

Early Childhood Education

Early Childhood Education Non-Licensure

Special Education

Secondary Teaching in Social Studies, Communication Arts & Literature, Sciences, Mathematics, and Health

K-12 Teaching in TESL, Physical Education, Art, Music, and Spanish

Program specific information is available at [HERE](#).

## Teacher Education Requirements

To be eligible for graduation in any MSUM teacher education major, students must fulfill the following requirements:

- Admission to teacher education (SARTE) and retention in good standing.
- Completion of an education sequence of courses as established by the chosen program.
- Successful completion of all field experiences and student teaching.
- Take the Minnesota basic skills exams (MTLE) or submit eligible ACT + Writing scores or eligible SAT scores.

Students are also strongly encouraged to take the Minnesota content and pedagogy exams before graduation. Testing information can be found [HERE](#).

## Selective Admission and Retention in Teacher Education (SARTE)

Formal admittance to Teacher Education (SARTE) is required before enrolling in 300 and 400 level courses with the prefixes ED, EECE, SPED, and STL.

To be admitted to Teacher Education, certain requirements must be met.

Students must earn a minimum GPA of 2.8 (Elementary Inclusive and Early Childhood, and Special Education) or GPA of 2.5 (Secondary/K-12 Education) in order to be admitted into Teacher Education. All students must take SPED 225, ED 205, and ED 294, earning at least a grade of C in each course. There are also dispositions, personal initiative, and testing requirements. For more information, please see the [SARTE](#) page.

## Retention in Teacher Education

Once a student has been admitted to Teacher Education, there are 3 points at which a student's progress is reviewed.

### Retention Point I

#### Early Childhood Education and Elementary Inclusive Education

At the time of advising, the student and advisor will review GPA, course grades in the major, and dispositions concerns. The advisor will be able to check eligible to continue or not eligible to continue in Diary.

#### Secondary/K-12

Semester after taking ED 310: During advising, the student and advisor will review GPA, course grades in major, and dispositions concerns. The advisor will be able to check eligible to continue or not eligible to continue in Diary.

### Retention Point II

#### All Majors

Application for Student Teaching: During advising, the student and advisor will review GPA, course grades in the major, dispositions concerns, MTLE scores, and that all courses in the major have been or will be completed before student teaching begins. The advisor will be able to check eligible for student teaching or not eligible for student teaching in Diary.

### Retention Point III

Completion of Student Teaching: Students must meet all of the requirements for student teaching to be eligible for graduation.

## Dismissal from Teacher Education

A student may be dismissed from Teacher Education if remediation of knowledge, skills, and/or dispositions has been unsuccessful. A student may also be dismissed for a violation of The Code of Teacher Ethics as put

forth by the Minnesota Board of Teaching. The Code of Ethics can be found in the MSUM Student Teaching Handbook and on the [Minnesota Board of Teaching website](#).

### **Student Teaching**

Student teaching is the culminating experience for all education majors. Required courses in the major must be completed before student teaching. The [Student Teaching Handbook](#) gives a detailed description of the requirements and expectations for student teaching.

The online Student Teaching Application can be found in DIARY. A paper copy of the checklist must be submitted to the Field Experience Office, Lommen 211G.

Student Teaching Application Deadlines: For spring, applications are due September 15; for fall, applications are due February 15.

Students who would like to student teach outside a 60-mile radius of the Fargo/Moorhead area must talk to the Director of Field Experiences a year before the student teaching semester.

### **Minnesota Teacher Licensure Requirements**

MSUM will recommend you for licensure to the state of Minnesota when you have completed all requirements. Licensure information can be found [HERE](#).

The application for Minnesota licensure must be submitted online [HERE](#).

Minnesota State University Moorhead prepares students for Minnesota teacher licensure. A student interested in licensure from other states (including North Dakota) should contact departments of teacher licensure in those states for specific information, as it is the student's responsibility to meet individual states' requirements for licensure.

### **School of Art**

**Roland Dille Center for the Arts 161**

**(218) 477-2151 or 477-2317**

**Chair:** Laurie Blunsom

**Faculty:** Anna Arnar, Bradley Bachmeier, Zhimin Guan, Lauren Kinney, Carlos Pacheco, Jim Park, Sherry Short, Wil Skynkaruk, Kelli Sinner, Patrick Vincent, Chris Walla

**Staff:** Kenneth Brown, Shirlee Holland

### **Department Goals and Philosophy**

Most human perception is based on stereotyped conceptions of the world around us. The study of visual art breaks down those stereotypes providing a truer understanding of the physical world and its workings. This understanding then forms the basis for the effective communication of personal ideas and concepts through visual and tactile media.

The programs in the School of Art teach students the basic principles of art, instruct students in the use of materials, encourage the investigation of the creative process, and provide a framework for understanding the field of art in the historic and contemporary context. This knowledge forms the basic visual and conceptual vocabulary that is used to explore one's personal expression. The department also emphasizes the benefits of a balanced liberal arts education. School of Art majors are prepared to perform competently whether they go on to professional practice, teaching or post-graduate study.

The School of Art and its programs are accredited through the National Association of Schools of Art and Design (NASAD).



### **Degrees offered by the School of Art**

- Bachelor of Fine Arts in Studio Art
- Bachelor of Fine Arts in Art Education
- Bachelor of Arts in Art History

### **The School of Art offers the following minors and certificates:**

- Minor in Studio Art
- Minor in Art History
- Minor in Art Therapy
- Certificate in Scientific Illustration
- Certificate in Sequential Art
- Certificate in Book Illustration
- Certificate in Professional Portfolio Development

### **Emphasis areas in Studio Art**

Students working toward a degree in Studio Art may declare an emphasis in any of the following areas:

- Ceramics
- Drawing and Illustration
- Painting
- Photography
- Printmaking
- Sculpture

### **Emphasis Area Descriptions**

#### **Art Education**

The Bachelor of Fine Art in Art Education provides students with the skills, knowledge and practical site experiences to design and deliver art instruction in the grade school system or other venues such as museums, community centers, elder care facilities, etc. Qualifications for teacher licensure in Minnesota and North Dakota will require an additional semester of student-teaching/coursework.

#### **Art History**

This program is offered for students whose principal interest is in museum work, teaching in higher education or other fields related to visual arts. Course requirements are designed to familiarize students with the major fields in Art History.

#### **Ceramics**

Students learn a wide range of technical skills within the area of studio ceramics. Students are acquainted with the technology of ceramic materials and firing processes while developing sound craftsmanship as a means to personal expression.

#### **Drawing and Illustration**

Students enrolled in Drawing and Illustration develop a personal approach selecting from a variety of drawing materials and concepts. Drawing is emphasized as an end in itself, beyond the more traditional idea that drawing is mainly a preparatory process for the development of visual ideas for other media. The Drawing and Illustration emphasis offers students a program integrating advanced drawing skills and digital applications with concepts of narrative development and visual form.

## **Painting**

After acquiring a thorough foundation in materials and techniques, students are encouraged to develop personal approaches to form and content, style and expression. Individual and group critiques, as well as slide lectures and demonstrations, guide this process. Internships are encouraged.

## **Photography**

The emphasis in Photography includes both traditional and contemporary approaches to Photography, encompassing developing, advanced composition, lighting techniques, retouching and negative manipulation, toning, hand coloring and slide processing. Portraiture, night photography, landscape topography and use of large camera format are taught. Students are encouraged to develop individual styles based on self-awareness. Internships are encouraged.

## **Printmaking**

Students learn a broad foundation in printmaking using relief, screen print, intaglio, monotype, and lithographic processes. They explore conceptual as well as technical development through traditional and experimental methods in print and image making. Students acquire historical knowledge of the medium, as well as develop individual, contemporary perspectives with regard to their own work.

## **Sculpture**

Students are exposed to a broad range of materials, processes, techniques, and concepts as they pertain to both traditional and non-traditional approaches to making sculpture. Topics may include, but are not limited to, wood fabrication, cold and hot steel fabrication, casting methods including bronze casting and mold making, approaches to the figure, site-specific works, self-motivated and self-guided material, technical, and content investigations incorporating unique personal imagery.

## **Certificate in Scientific Illustration**

The Certificate in Scientific Illustration is an interdisciplinary set of courses focusing on illustration in the biosciences. Students interested in continuing on to graduate work in medical or scientific illustration should work closely with the Certificate Program Coordinator. Seeking admission to the certificate in the sophomore year is recommended.

## **Certificate in Sequential Art**

The Certificate in Sequential Art is an interdisciplinary set of courses designed for students preparing for careers in comic illustration, printmaking, animation, and other sequential art forms.

## **Certificate in Book Illustration**

The Certificate in Book Illustration is an interdisciplinary set of courses designed to prepare students for illustrating writing and publishing books.

## **Certificate in Professional Portfolio Development**

The Certificate in Professional Portfolio Development is designed for students who already hold a BFA in Studio Art from MSUM or equivalent. Students who wish to further develop their portfolios technically, philosophically, and conceptually will find this program invaluable. This certificate is designed to produce artists who are competitive in the national arena for sought after opportunities in areas such as grants, residencies, exhibitions, and education.

Students must apply for acceptance into the Professional Portfolio Development certificate program by presenting a body of work for review by a committee of a minimum of three art faculty, including the

committee chair who must be permanent art faculty and from the studio area being researched. No more than one temporary faculty may be on each committee. For admission to the certificate, students must have an overall GPA of 2.75 and a GPA of 3.0 in art and design courses.

## **ADDITIONAL DEGREE REQUIREMENTS**

### **Computer and Software Requirement**

All students majoring in Studio Art with an emphasis in Photography and entering the 303 course are required to possess a Macintosh laptop computer with appropriate software for the area. Specifications for the hardware and software will be given out in the introductory course or may be obtained from the professors in the photography emphasis.

### **Colloquium Lecture Series**

All School of Art majors must complete the colloquium requirement by attending four colloquium lectures. It is expected the students complete the requirement in their first year of study.

### **Portfolio Reviews**

Students seeking the degree in Studio Art or Art Education are required to complete two portfolio reviews; one in the spring semester of their freshman year, and the second in the fall semester of their junior year. Record of their participation in portfolio reviews is kept on file in the School of Art. Completion of these two reviews is required for advancement to the next level of study. Transfer students must meet with their School of Art advisor during their initial semester in the department to discuss scheduling a review and tailoring the review process to reflect their past experiences.

### **Exhibition**

All students intending to graduate with a BFA in Studio Art, BFA in Art Education or a Certificate in Professional Portfolio Development must successfully prepare a selection of works for exhibition in the Roland Dille Center for the Arts Gallery, and must take part in a group exhibition, as arranged by the Gallery Director. Application for exhibition must be made one semester prior to exhibition (March 15 for fall exhibition; October 15 for spring exhibition). A form recording the successful completion of a student's exhibition effort is forwarded to the Registrar's Office in preparation for graduation.

### **Art Education Licensure**

To receive the BFA Degree in Art Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits) and Secondary Teaching Licensure Education requirements (36 credits). Students need to fulfill the School of Teaching and Learning requirements for licensure. Qualifications for teacher licensure in Minnesota or North Dakota will require one additional semester of student teaching/coursework.

### **Art History Thesis**

Students pursuing the Art History degree will write a thesis and give a public presentation in their final year.

### **Internship**

Students seeking a BA/BFA in any area of emphasis may seek an internship. Internship requests should be made to the major advisor and must be approved for credit in advance.

## Transfer Credit Policy

A student's assigned advisor or the chair can approve acceptance of transfer credits for Art courses for the department's foundations program.

Transfer students seeking approval for other Art courses must have those courses approved by their advisor, an instructor in the area of study, and the Department chair. Signatures from the professors involved must be obtained on the Departmental Request for Course Exception form.

Students seeking transfer credit for Art courses will be interviewed by a faculty member in the area of study of the transfer course. The student will be expected to present a syllabus or course outline and portfolio of work produced in the class sought for transfer credit.

Please see this **Bulletin** for general information and guidelines on the policy for transfer credits outside the School of Art.

## Scholarships

In addition to standard MSUM academic scholarships, the School of Art grants Freshmen and Transfer Student Talent Scholarships and Upper Level Scholarships on a competitive basis. Contact the department office for further information.

## B.A. in Art History

The Bachelor of Arts degree in Art History is offered for students whose principal interest is in museum/gallery professions, education, research, restoration, or other fields related to the visual arts. Course requirements are designed to familiarize students with the major subject areas in Art History and interdisciplinary themes current in the profession. Requirements include the year long Global Art History Survey of Art and seven upper-level Art History courses. Additional courses in studio art, a foreign language, and a senior research project with a public presentation are required for graduation. To receive the B.A. Degree in Art History, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits). Students must earn a C- or higher in all art courses.

### Student Learning Outcomes

- Ability to identify the social, political, and cultural contexts of the major periods and movements in the history of art.
- Ability to identify the primary artistic concepts and apply appropriate vocabulary in the major movements of the history of art.
- Ability to conduct art historical research and exercise information literacy.
- Ability to write and appropriately format a research paper.
- Ability to deliver an effective oral presentation with the use of visual aids and technology.
- Ability to read at a rudimentary level a foreign language (based on a minimum of one year of study)

### Core Requirements (12 credits)

ART 233 Global Art History I (3)

ART 233M Global Art History I: Methods (1)

ART 234 Global Art History II (3)

ART 234M Global Art History II: Methods (1)

ART 450 Contemporary Art, Design, and Theory (4)

### Program Requirements (6 credits)

Students must earn 6 credits in ART 479. This course is titled Art History Thesis, and as a graduation requirement, students are required to present their Art History Thesis publicly.

### Related Requirements (8 credits)

Students must take at least one year of a foreign language (eight credits), or demonstrate equivalent competency. Ancient, medieval or modern languages may be used to fulfill the requirement. For students intending to pursue graduate level education, a second foreign language is strongly recommended.

### Restricted Electives (36 credits)

Students must earn 8 credits in Studio. Choose from the following:

ART 101 Basic Drawing I (4)

ART 102 Basic Drawing II (4)

ART 125 Foundation Design (4)

Students must earn 28 credits in Art History courses at the 300 level or higher.

ART 338 Non-Western Art (4)

ART 345 Art of Social and Environmental Justice (3)

ART 398 Gallery Management (3)

ART 408 Women and Art (4)

ART 411 Medieval Art (4)

ART 420 Renaissance Art (4)

ART 425 Art History Field Experience (4)

ART 430 Nineteenth Century Art (4)

ART 431 Twentieth Century Art (4)

ART 470 Art and Archaeology of Ancient Egypt (4)

### Recommended Electives

Courses in history, religion, philosophy, literature, anthropology, archaeology, humanities, multicultural studies, American studies, Women's and Gender Studies, Foreign Language/Literature/Culture, and Business may be beneficial to students in this emphasis and should be chosen in consultation with the art history program coordinator.

HIST 226 Introduction to Cultural Management (3)

ART 469 Internship (1-6)

ART 320 Philosophy of the Arts (3)

## **BFA Degree in Art Education**

The Bachelor of Fine Art in Art Education provides students with the skills and knowledge to design and deliver art instruction in the grade school system or other venues such as museums, youth centers, elder care facilities, etc. Qualifications for teacher licensure in Minnesota or North Dakota will require one additional semester of student-teaching/coursework. To receive the BFA Degree in Art Education, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.75 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits). Students must earn a grade of C- or higher in all program requirements.

Student Learning Outcomes

- Understanding the elements of art and the principles of design.
- Ability to develop and successfully convey artistic concepts.
- Ability to envision and develop original approaches to art making.
- Craftsmanship (skill, sensitivity, consistency of technique).
- Expressive quality (concept, style, choice of media, etc.).
- Representative skill (proportions, perspective, etc.).
- Verbal communication (professional presentation skills).
- Physical presentation (professional presentation skills).
- Overall portfolio development.

#### Core Requirements (65 credits)

ART 101 Basic Drawing I (4)

ART 102 Basic Drawing II (4)

ART 125 Foundation Design (4)

ART 233 Global Art History I (3)

ART 233M Global Art History I: Methods (1)

ART 234 Global Art History II (3)

ART 234M Global Art History II: Methods (1)

ART 350 Methods and Materials: Art for the Elementary Classroom (3)

ART 375 Art Methods 7-12 (3)

ART 402 Advanced Methods: Art Education (3)

**Total: 29 credits**

#### Secondary Education Licensure Requirements

AMCS 233 Education and Multicultural America (3)

COMM 100 Speech Communication (3)

ED 205 Introduction to Education (3)

ED 294 Educational Psychology (3)

ED 310 Social Foundations of Education (3)

ED 498 The Professional Teacher in the Classroom (3)

ED 448 Reading Study Skills in the Content Areas (3)

ED 461S Student Teaching: Secondary (12) **or**

ED 460S Student Teaching: Secondary (6) **and**

EECE 480E Student Teaching: Elementary (6) **or**

ED 461V Student Teaching: Secondary/K-12 (12)

SPED 225 Individuals with Exceptionalities (3)

**Total: 36 credits**

#### Program Requirements

Student must attend a Colloquium Lecture Series, Portfolio Review 1 and 2, and an Exhibition. A grade of C- must be earned in all ART courses counted towards the major. A minimum of 5 ART courses must be taken at MSUM.

Students need to fulfill the School of Teaching and Learning's SARTE requirements in order to take the required upper level education courses.

Student teaching is NOT required for this degree; however if the student wants licensure in ND/MN, student teaching is required.

### Restricted Electives (32 credits)

ART 203x Intro Studio (4)  
ART 203x Intro Studio (4)  
ART 203x Intro Studio (3D) (4)  
ART 203x Intro Studio (4)  
ART 203x Intro Studio (4)  
ART 303x Intermediate Studio (4)  
ART 303x or 304x Intermediate Studio (4)  
ART 303x or 304x or 305x Studio (4)

*x indicates the student may select from: A-Ceramics, C-Painting, D-Printmaking, E-Sculpture, F-Photography, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.*

### **BFA Degree in Studio Art**

The Bachelor of Fine Art degree is designed to prepare students for a career in Studio Art or Design. The BFA provides focused in-depth training in a chosen studio emphasis. Emphases available include: ceramics, drawing and illustration, painting, photography, printmaking, or sculpture. To receive the BFA Degree in Studio Art, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.75 GPA or above is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits). A 3.0 or above art GPA is required for graduation. Students must earn a grade of C or higher in all program requirements.

#### Student Learning Outcomes

- Understand the elements of art and the principles of design.
- Ability to develop and successfully convey artistic concepts.
- Ability to envision and develop original approaches to art making.
- Craftsmanship (skill, sensitivity, consistency of technique).
- Expressive quality (concept, style, choice of media, etc.).
- Representative skill (proportions, perspective, etc.).
- Verbal communication (professional presentation skills).
- Physical presentation (professional presentation skills).
- Overall portfolio development.

### Core Requirements (27 credits)

ART 101 Basic Drawing I (4)  
ART 102 Basic Drawing II (4)  
ART 125 Foundation Design I (4)  
ART 233 Global Art History I (3)  
ART 233M Global Art History I Methods (1)  
ART 234 Global Art History II (3)  
ART 234M Global Art History II Methods (1)  
ART 480 Professional Practices in Art (3)  
ART 450 Contemporary Art, Design & Theory (4)

### Program Requirements

Colloquium Lecture Series (expected completion in the first year)  
Portfolio Review 1

## Portfolio Review 2

### Exhibition

A grade of C- or better must be earned in order for art courses to count towards the major.

A minimum of 5 courses must be from MSUM's School of Art.

## Ceramics Emphasis

### Program Requirements (28 credits)

ART 203A Intro to Ceramics and Clay Processes (4)

ART 303A Intermediate Pottery/Wheel Throwing (4)

ART 304A Intermediate Handbuilding/Ceramic Sculpture (4)

ART 305A Technical Ceramics (4)

ART 306A Ceramics Studio (4)

ART 404A Ceramics Studio (4)

ART 405A Ceramics Studio (4)

### Restricted Electives (24 credits)

ART 203x Intro Studio (must be 2D) (4)

ART 203x Intro Studio (4)

ART 203x Intro Studio (4)

300-level Intermediate Studio Course outside of emphasis (4)

Art History (Upper Level) (4)

Art History (Upper Level) (4)

***x indicates the student may select from: C-Painting, D-Printmaking, E-Sculpture, F-Photography, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.***

## Painting Emphasis

### Program Requirements (24 credits)

ART 203C Intro to Painting (4)

ART 303C Painting: Technique, Color and Composition (4)

ART 404C Figure Drawing/Painting Studio (4)

ART 405C Painting Studio (4)

8 credits from the following three courses:

ART 304C Painting: Portraiture (4)

ART 305C Painting: Abstract and Mixed Media (4)

ART 306C Painting: Watercolor (4)

### Restricted Electives (24 credits)

ART 203x Intro Studio (must be 3D) (4)

ART 203x Intro Studio (4)

ART 203x Intro Studio (4)

300-level Intermediate Studio Course outside of emphasis (4)

Art History (Upper Level) (4)

Art History (Upper Level) (4)

***x indicates the student may select from: A-Ceramics, D-Printmaking, E-Sculpture, F-Photography, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.***



## **Printmaking Emphasis**

### **Program Requirements (24 credits)**

ART 203D Introduction to Printmaking (4)

ART 404D Printmaking Studio (4)

ART 405D Printmaking Studio (4)

12 credits from the following four courses:

ART 303D Printmaking: Relief, Paper, Book (4)

ART 304D Printmaking: Intaglio & Photo-based Printmaking (4)

ART 305D Printmaking: Planographic & Digital Applications (4)

ART 306D Printmaking: Experimental Printmaking Methods (4)

### **Restricted Electives (24 credits)**

ART 203x Intro Studio (must be 3D) (4)

ART 203x Intro Studio (4)

ART 203x Intro Studio (4)

300-level Intermediate Studio Course outside of emphasis (4)

Art History (Upper Level) (4)

Art History (Upper Level) (4)

***x indicates the student may select from: A-Ceramics, C-Painting, E-Sculpture, F-Photography, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.***

## **Sculpture Emphasis**

### **Program Requirements (24 credits)**

ART 203E Introduction to Sculpture (4)

ART 404E Sculpture Studio (4)

ART 405E Sculpture Studio (4)

12 credits from the following four courses:

ART 303E Sculpture: Technique & Object Making (4)

ART 304E Sculpture: Installation & Space (4)

ART 305E Sculpture: Concepts in Materiality (4)

ART 306E Sculpture: Concepts in Contemporary Sculpture (4)

### **Restricted Electives (24 credits)**

ART 203x Intro Studio (must be 2D) (4)

ART 203x Intro Studio (4)

ART 203x Intro Studio (4)

300-level Intermediate Studio Course outside of emphasis (4)

Art History (Upper Level) (4)

Art History (Upper Level) (4)

***x indicates the student may select from: A-Ceramics, C-Painting, D-Printmaking, F-Photography, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.***

## **Photography Emphasis**

### **Program Requirements (28 credits)**

ART 203F Introduction to Photography (4)  
ART 303F Contemporary Digital Concepts (4)  
ART 304F Experimental Techniques in Photography (4)  
ART 305F Untrue Narrative (4)  
ART 306F Identity in Photography (4)  
ART 404F Photography Studio (4)  
ART 405F Photography Studio (4)

### **Restricted Electives (24 credits)**

ART 203x Intro Studio (must be 3D) (4)  
ART 203x Intro Studio (4)  
ART 203x Intro Studio (4)  
300-level Intermediate Studio Course outside of emphasis (4)  
Art History (Upper Level) (4)  
Art History (Upper Level) (4)

***x indicates the student may select from: A-Ceramics, C-Painting, D-Printmaking, E-Sculpture, H-Drawing, K-Fiber/Textiles, L-Illustration, N-Papermaking.***

## **Drawing and Illustration Emphasis**

### **Program Requirements (24 credits)**

ART 203H Introduction to Drawing Concepts and Methodologies (4)  
ART 404C Figure Drawing and Painting (4)  
ART 405H Advanced Studies and Drawing and Illustration (4)

12 credits from the following courses:

ART 303H Perceptual Drawing (4)  
ART 304H Contemporary Drawing Concepts and Methodologies (4)  
ART 305H Sequential Art (4)  
ART 305L Digital Illustration (4)

### **Restricted Electives (24 credits)**

ART 203x Intro Studio (must be 3D) (4)  
ART 203x Intro Studio (4)  
ART 203x Intro Studio (4)  
300-level Intermediate Studio Course outside of emphasis (4)  
Art History (Upper Level) (4)  
Art History (Upper Level) (4)

***x indicates the student may select from: A-Ceramics, C-Painting, D-Printmaking, E-Sculpture, F-Photography, K-Fiber/Textiles, N-Papermaking.***

## **Minor in Art – 26 credits**

ART 101 Basic Drawing I (4)  
ART 125 Foundation Design (4)

Students must complete two courses from the following list: (6 credits)

ART 170 Art Appreciation (3)  
ART 233 Global Art History I (3)  
ART 234 Global Art History II (3)  
ART 270 Visual Culture (3)

**AND**

Students must take 3 courses from the following list: (11-12 credits)

ART 102 Basic Drawing II (4)  
ART 203A Introduction to Ceramics and Clay Processes (4)  
ART 203C Introduction to Painting (4)  
ART 203D Introduction to Printmaking (4)  
ART 203E Introduction to Sculpture (4)  
ART 203F Introduction to Photography (4)  
ART 203H Introduction to Drawing Concepts & Methodologies (4)  
ART 203K Introduction to Fiber/Textile Design (4)  
ART 203L Introduction to Illustration (4)  
ART 203N Introduction to Papermaking (4)  
ART 311 Pottery: Principles of Production and Design (3)  
Any 300-level studio art class (4)

**Minor in Art History – 28 credits**

ART 233 Global Art History I (3)  
ART 233M Global Art History I: Methods (1)  
ART 234 Global Art History II (3)  
ART 234M Global Art History II: Methods (1)

Students must earn sixteen credits in Art History courses at the 300 level or above.

Students must earn four credits from the following list of courses:

ART 101 Basic Drawing I (4)  
ART 125 Foundation Design (4)

**Minor in Art Therapy – 34 credits**

The School of Art and the Psychology Department work in tandem to offer a minor in Art Therapy. This rapidly expanding mental health profession utilizes the creative process of art making with individuals of all ages to improve and enhance their physical, mental, and emotional well-being. Art therapy practice reflects a belief that the creative process involved in artistic self-expression helps people to resolve conflicts and problems, develop interpersonal skills, manage behavior, reduce stress, increase self-esteem and self-awareness, and achieve insight. The techniques and methods of art therapy can enhance one's skills in related majors and fields such as: Psychology, Sociology, Health, Recreation and Leisure, Fine Arts and Criminal Justice. Our minor provides a foundation for continued study, or for work in community arts programs and organizations where art is used as part of the therapeutic or recreational process. This minor meets and exceeds the American Art Therapy Association's basic requirements for entrance into their approved graduate programs by requiring 18 studio art credits and 12 psychology credits. Additionally, our minor includes an Introduction to Art Therapy

course and an Art Therapy related field experience practicum. Should a student wish to go to graduate school in art therapy he/she is advised to consult the graduate bulletin of the institution he/she wishes to attend for institution specific entrance requirements. Art therapists are masters' or doctorate level professionals who hold a degree in art therapy or a related field. Graduate Study in Art therapy integrates the fields of human development, visual art modalities (drawing, painting, sculpture, and other art forms), and the creative process with models of counseling and psychotherapy. Art therapy programs are found in a number of settings including hospitals, clinics, public and community agencies, wellness centers, educational institutions, businesses, elder-care facilities and private practices.

**Upon successful completion of this minor, students will:**

- Have a better understanding of the types of organizations and agencies where Art Therapy could be utilized including hospitals, clinics, public and community agencies, wellness centers, educational institutions, businesses, elder-care facilities and private practices.
- Be aware of the philosophy, theory and practice of Art Therapy.
- Understand how the creative process of art making with individuals of all ages can improve and enhance their physical, mental, and emotional well-being.
- Understand how Art Therapy may be integrated and utilized within the larger fields of Psychology, Sociology, Health, Recreation and Leisure, Fine Arts and Criminal Justice.
- Gain a foundation for continued study, or for work in community arts programs and organizations where art is used as part of the therapeutic or recreational process.
- Gain a basic understanding and skills to use both two and three dimensional visual art modalities and media (drawing, painting, sculpture, and other art forms) in working with clients in a therapeutic setting.
- Gain capacity for productive self-reflection, empathy, and insight in consideration of practice in Art Therapy.
- Develop as artists, gaining an experiential understanding of materials, process and product, as they relate to art therapy practice.

Psychology Requirements (12 credits)

PSY 113 General Psychology (3)  
PSY 202 Developmental Psych (3)  
PSY 261 Personality (3)  
PSY 463 Abnormal Psychology (3)

Art Requirements (11-12 credits)

ART 101 Basic Drawing I (4)  
ART 125 Foundation Design (4)  
ART 311 Pottery: Principles and Production (3) **OR**  
ART 203A Intro to Ceramics (4)

Art Therapy Requirements (4 credits)

PSY 325/ART 325 Introduction to Art Therapy (3)  
ART 467 Art Therapy Related Field Experience (1)

Restricted Electives (7-8 credits)

ART 203C Introduction to Painting (4)  
ART 203D Introduction to Printmaking (4)  
ART 203E Introduction to Sculpture (4)

ART 203F Introduction to Photography (4)  
ART 203L Introduction to Illustration (4)  
ART 350 Elementary Methods and Materials (3)

### **Certificate in Book Illustration – 24 credits**

The Certificate in Book Illustration is an interdisciplinary set of courses designed to prepare students for illustrating, writing, and publishing books.

#### Admission Requirements

Students seeking this certificate must demonstrate basic drawing and foundation design competencies through a portfolio review with the program coordinator or by completing ART 101, ART 102 and ART 125 with a C- or better.

#### Student Learning Outcomes

- Gain an understanding of the integration of visual images, content, and layout of textual narratives.
- Develop illustration skills across a range of media.
- Exposure to multi-cultural approaches to visual and written narratives.

ART 203L Introduction to Illustration (4)  
ART 203C Introduction to Painting (4) or ART 203D Introduction to Printmaking (4)  
ART 305H Sequential Art (4)  
ENGL 288 Introduction to Creative Writing (3)  
ENGL 388 Creative Writing (3) or ENGL 423 Writing for Children (3)

6 to 8 credits of restricted electives from the list below:

ART 203N Introduction to Papermaking (4)  
ART 305L Digital Illustration (4)  
ENGL 402 Introduction to Publishing (3)  
ENGL 325 Literature for Young Readers (3)  
ENGL 352 Native American Literature (3)  
ENGL 356 African American Literature (3)  
ENGL 388 Creative Writing (3) or ENGL 423 Writing for Children (3)  
\*Upper Level Art History course can be taken when topic is appropriate

### **Certificate in Sequential Art – 23 credits**

Certificate in Sequential Art is an interdisciplinary set of courses designed for students preparing for careers in comic illustration, printmaking, animation, and other sequential art forms.

#### Admission Requirements

Student seeking certificate must demonstrate basic drawing and foundation design competencies through a portfolio review with the program coordinator or by completing ART 101, ART 102, and ART 125 with a C- or better.

#### Student Learning Outcomes

- Students' portfolio development will be strengthened through interdisciplinary course work.
- Students will develop an interdisciplinary skill set in demand in careers in sequential art.

ART 203L Introduction to Illustration (4) or GCOM 255 Beginning Computer Graphics (3)  
ART 203D Introduction to Printmaking (4) or GDES 203 Introduction to Graphic Design (4)  
ART 305H Sequential Art (4)  
ENGL 288 Introduction to Creative Writing (3)

9 to 12 credits of restricted electives from the list below:

ART 101 Basic Drawing I (4) \*Does not count as restricted elective for School of Art majors  
ART 305L Digital Illustration (4)  
ENGL 402 Introduction to Publishing (3)  
ENGL 388 Creative Writing (3)  
FILM 375 Animation Techniques (3)  
GDES 203 Introduction to Graphic Design (4) \*Does not count as restricted elective for School of Media Arts and Design majors  
GDES 303 Typography (4)

### **Certificate in Scientific Illustration – 27 credits**

The Certificate in Scientific Illustration is an interdisciplinary set of courses focusing on illustration in the biosciences. Students interested in continuing on to graduate work in medical or scientific illustration should work closely with the Certificate Program Coordinator. Seeking admission to the certificate in the sophomore year is recommended.

#### Admission Requirements

Students seeking this certificate must demonstrate basic drawing competencies through a portfolio review with the program coordinator or by completing ART 101, ART 102, and ART 125 with a C- or better.

#### Student Learning Outcomes

- Focused development of perceptual drawing skills and technical abilities necessary for realistically rendering plant and animal forms
- Understanding of relationships between form and function of organisms as well as relationships of organisms to their environments
- Development of interdisciplinary knowledge bridging science and illustration

ART 203L Introduction to Illustration (4)  
ART 203H Introduction to Drawing Concepts and Methodologies (4)  
ART 303H Perceptual Drawing (4)  
BIOL 115 Organismal Biology (4)

11-13 credits of restricted electives below:

ART 400L Individualized Studies in Illustration (2) **OR**  
ART 400H Individualized Studies in Figure Drawing (2)  
CHEM 150/CHEM 150L General Chemistry I and Lab (4)  
CHEM 210/CHEM 210L General Chemistry II and Lab (4)  
BIOL 111/BIOL 111L Cell Biology and Lab (4)  
BIOL 305 General Botany (4)  
BIOL 321 Invertebrate Zoology (3)

BIOL 322 Vertebrate Zoology (4)  
BIOL 323 Human Anatomy (4)  
BIOL 326 Minnesota Plant Identification (4)  
BIOL 347 Plant Physiology (4)  
BIOL 349 Human Physiology (4)

### **Certificate in Professional Portfolio Development – 20 credits**

The Certificate in Professional Portfolio Development is designed for students who already hold a Bachelor's Degree in Art or Art Education and seek to expand their skills through intensive study and studio practice. Students who wish to further develop their portfolios, technically, philosophically, and conceptually will find this program invaluable. This certificate is designed to produce artists who are competitive in the national arena for sought-after opportunities in areas such as grants, residencies, exhibitions, and education.

#### Admission Requirements

Students must hold a BA or BFA in studio art, or the equivalent, or a BFA in Art Education before entering the Certificate in Professional Portfolio Development. Students must apply for acceptance into the Professional Portfolio Development Certificate program by presenting a body of work for review by a committee of a minimum of three art faculty, including the committee chair who must be permanent art faculty and from the studio area being developed. No more than one temporary faculty may be on each committee. For admission to the certificate, students must have an overall GPA of 2.75 and a GPA of 3.0 in Art and Design.

Art History Upper Level, Internship, or ART 494 Mentored Studio Research (4)  
ART 498 Exhibition (4)

Students will attend required critique sessions with department faculty and other certificate students. Completion of the certificate requires the signature of all three committee members approving the level of research completed. This requirement is in addition to all coursework requirements.

Choose 12 credits from the following, as approved by your committee (courses may be repeated for credit).

ART 494A Mentored Research in Ceramics (1-8)  
ART 494C Mentored Research in Painting (1-8)  
ART 494D Mentored Research in Printmaking (1-8)  
ART 494E Mentored Research in Sculpture (1-8)  
ART 494F Mentored Research in Photography (1-8)  
ART 494H Mentored Research in Drawing (1-8)  
ART 494L Mentored Research in Illustration (1-8)

### **Social Work**

#### **School of Social Work**

**Lommen 114, (218) 477-2632**

**Chair:** Shawn Ginther

**Faculty:** Jeremy Carney, Tracy Clark, Janelle Miedema

The Minnesota State University Moorhead Social Work Program is accredited by the Council on Social Work Education. The principle educational objective of the social work major is to prepare students for beginning professional generalist social work practice. This course of study also prepares students for graduate

education. The Bachelor of Social Work (BSW) degree is awarded upon completion of all university and social work major requirements both within the department and in related areas.

Transfer students with an AA or BA degree from another college or university are exempt from Minnesota State University Moorhead's Liberal Arts and Sciences Curriculum requirement. However, social work majors who are transfer students entering under the Liberal Arts and Sciences Curriculum requirements must have the equivalent of one course from Area 7, Human Diversity and one course from Area 8, Global Perspective.

### **Admission to the Major**

Students who wish to major in social work must join TK20/Watermark and then complete a formal application. Details are located in the [School of Social Work Student Handbook](#).

### **Criteria for Admission to Social Work**

- The student must obtain a grade of "C" or above in all required social work courses and related requirements.
- The student must have an overall MSUM GPA of 2.5 or higher at the time of application for admission.
- The student must have completed or be enrolled in SW 250 and SW 330, or their approved equivalents at other colleges or universities.
- The student must apply for and prove student membership in NASW.
- The student must purchase a TK20/Watermark membership.
- Transfer students must document successful completion of a volunteer experience.

Current major requirements are available on the school webpage and in the student handbook. A grade of "C" or higher must be earned in all social work and related courses. A MSUM GPA of 2.5 must be in place prior to internship and at the time of graduation. Students are encouraged to contact the department chair for further information or clarification.

### **B.S.W. Degree in Social Work**

To receive the BSW Degree in Social Work, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits with a 2.5 GPA or higher is required to graduate with this degree which includes the Liberal Arts and Sciences Core (42 credits). A grade of C or higher is required in all courses for the program.

### **Student Learning Outcomes**

- Identify as a professional social worker and conduct oneself accordingly.
- Apply social work ethical principles to guide professional practice.
- Apply critical thinking to inform and communicate professional judgments.
- Engage diversity and differences in practice.
- Advance human rights and social and economic justice.
- Apply knowledge of human behavior and the social environment.
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
- Respond to contexts that shape practice.
- Engage, assess, intervene and evaluate with individuals, families, groups, organizations, and communities.

Students must obtain a grade of C or higher in all courses listed.



### Core Requirements (37 credits)

SW 250 Introduction to Social Welfare and Social Work (3)  
SW 330 Human Behavior and the Social Environment (3)  
SW 400 Research Methods in Social Work (3)  
SW 420 Generalist Practice: Individuals (3)  
SW 435 Generalist Practice: Families & Groups (3)  
SW 450 Generalist Practice: Communities and Organizations (3)  
SW 460 Social Policy and Policy Practice (3)  
SW 468 Orientation to Internship (1)  
SW 469 Internship (12)  
SW 492 Field Supervision and Integrative Seminar (3)

### Related Requirements (25 credits)

BIOL 104 Human Biology (3)  
ECON 100 The American Economy (3)  
PARA 470 Government Benefits (3)  
POL 120 American National Government and Politics (3)  
PSY 113 General Psychology (3)  
PSY 202 Developmental Psychology (3)  
SOC 110 Introduction to Sociology (3)  
SOC 350 Methods and Statistics for Social Research (4)

### Restricted Electives (3 credits)

Students must take one elective. Students may take a course chosen from the list below, or a different elective approved by the student's advisor. Students must obtain a grade of C or higher in their elective.

SW 308 Social Gerontology (3)  
SW 402 Child Welfare Services (3)  
SW 410 Gerontology: Policy and Practice (4)  
SW 411 Chemical Dependency (3)  
SW 431 Readings in Social Welfare (2-3)  
SW 490 Topics in Social Work (1-3)  
SW 497 Independent Study (1-3)  
AMCS 372 Dynamics of Prejudice and Oppression (3)  
BIOL 300 Biology of Women (3)  
ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)  
POL 340 Public Administration (3)  
POL 341 Public Policy (3)  
PSY 463 Abnormal Psychology (3)  
SOC 219 Sociology of Sexual Behavior (3)  
SOC 310 Dominant-Subordinate Group Relations (3)  
SOC 333 Sociology of Gender (3)  
SPED 225 Individuals with Exceptionalities (3)

## **Sociology and Criminal Justice**

### **Sociology and Criminal Justice Department**

**Lommen Hall 212 (218) 477-2045**

**Chair:** Susan Humphers-Ginther

**Faculty:** Karen Branden, Geraldine Hendrix-Sloan, Joel Powell-Dahlquist, Katie Richardson-Jens, Denis Stead, Lee Vigilant, Deborah White

### **Criminal Justice**

Criminal Justice majors examine the criminal justice system and its components within a multidisciplinary framework. The major provides a broad analysis of the criminal justice system and its historical and contemporary social contexts.

### **Gerontology**

Gerontology is a field of study that integrates several disciplinary perspectives on human aging, including sociology, social work, psychology, and biology. It explores the aging process of individuals and societies, including the study of physical, mental, and social changes; the investigation of societal changes resulting from an aging population; and the application of this knowledge to policy and program development.

### **Sociology**

The sociology major focuses on the study of society, social inequality, organization, social problems, social institutions, and social interaction. As sociology majors, students investigate a wide range of topics such as minorities, family, crime, class, healthcare and religion. Students are encouraged to develop writing and social research skills, as well as a broad understanding of society and organization.

## **B.A. Degree in Criminal Justice**

Criminal Justice majors examine the criminal justice system and its components within a multidisciplinary framework. The major provides a broad analysis of the criminal justice system and its historical and contemporary social contexts. To receive the B.A. Degree in Criminal Justice, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Demonstrate an understanding of the social mechanisms, processes, and institutional arrangements that create and reproduce systems of power and inequality, such as race, gender, sexuality, and class.
- Demonstrate an understanding of the significant connections between individuals and social processes.
- Demonstrate knowledge of important theoretical perspectives in their discipline.
- Demonstrate an understanding of scholarly sources of information (i.e. research published in peer-reviewed journals).
- Critique methods, theory, and the work of other scholars.
- Conduct, interpret, present, and write reports about social scientific research using qualitative and/or quantitative methodologies.
- Explain current social phenomena as they relate to major theoretical traditions.

### **Core Requirements (20 credits)**

CJ 200 Introduction to Criminal Justice (4)

CJ 300 Criminology (3)  
CJ 335 Criminal Law (3)  
CJ 337 Criminal Procedure (3)  
CJ 400 Seminar in Criminal Justice (4)  
SOC 310 Dominant-Subordinate Group Relations (3)

Related Requirements (6 credits)

Students are required to complete at least six credits in research methods courses: SOC 350 Methods and Statistics for Social Research (4), and one of the following: SOC 351 Quantitative Methods (3), or SOC 352 Qualitative Research Methods (3). Students must take SOC 351 or SOC 352 as the required Writing Intensive course for the major.

Restricted Electives (12 credits)

Students must complete a minimum of 12 credits of restricted electives selected from the list below or any Criminal Justice course EXCEPT CJ 111 and CJ 469. 9 of those 12 credits must come from 300 or 400 level courses.

CJ 201 Introduction to Juvenile Justice (3)  
CJ 301 Delinquent Behavior (3) **or**  
SOC 301 Delinquent Behavior (3)  
CJ 303 Punishment and Prisons (3) **or**  
SOC 303 Punishment and Prisons (3)  
CJ 304 Community Corrections (3) **or**  
SOC 304 Community Corrections (3)  
CJ 306 Gangs (3)  
CJ 309 Law and Society (4) **or**  
SOC 309 Law and Society (4)  
CJ 312 Criminal Investigation (3)  
CJ 313 Law Enforcement (3)  
CJ 380 Global Criminal Justice (3)  
CJ 385 Crime, Justice, and Media (3)  
CJ 390 Topics in Criminal Justice (1-3)  
CJ 430 MN Criminal Law and Procedure (4)  
CJ 497 Readings in Criminal Justice (1-3)  
POL 230 Introduction to the Law (3)  
POL 332 Constitutional Law I: Institutional Powers and Constraints (3) **and**  
POL 333 Constitutional Law II: Civil Rights and Liberties (3)  
PSY 261 Personality (3)  
PSY 317 Alcoholism and Drug Abuse (3)  
PSY 463 Abnormal Psychology (3)  
SOC 220 Social Deviance (3)  
SOC 311 Sociology of Law Enforcement (3)  
SOC 390 Topics in Sociology (1-3)  
SOC 497 Readings in Sociology (1-3)  
SW 402 Child Welfare Services (3)  
SW 411 Chemical Dependency (3)  
SW 490 Topics in Social Work (1-3)

An internship is not required for the major. Internships are important as networking opportunities for those seeking employment. These are usually completed in the Junior or Senior year and may be taken in any academic term. Most students intern during the summer. Internship credits do not apply toward the Criminal Justice major requirement total of 47 credits.

#### Internship Contact Information

Dr. Geraldine Hendrix-Sloan

sloan@mnstate.edu

218-477-2037

Lommen 212L

#### Political Science Concentration

POL 120 American National Government and Politics (3)

POL 230 Introduction to the Law (3)

POL 332 Constitutional Law I: Institutional Powers and Constraints (3) **or**

POL 333 Constitutional Law II: Civil Rights and Liberties (3)

#### Psychology Concentration

PSY 113 General Psychology (3)

PSY 220 Social Behavior (3)

PSY 261 Personality (3)

#### Social Work Concentration

SW 250 Introduction to Social Welfare and Social Work (3)

SW 330 Human Behavior and the Social Environment (3)

SW 402 Child Welfare Services (3) **or**

SW 411 Chemical Dependency (3)

#### Sociology Concentration

SOC 110 Introduction to Sociology (3)

SOC 120 Social Psychology (3)

SOC 302 Social Theory (3) **or**

SOC 210 Social Problems (3)

#### Law Enforcement Track

Our Criminal Justice Program provides the opportunity for students to complete the Peace Officer Standards and Training (POST) certification through completion of specific coursework. Please contact Dr. Joel Powell for more information on the licensure and certification process: powell@mnstate.edu.

### **B.A. Degree in Gerontology**

Gerontology is a field of study that integrates several disciplinary perspectives on human aging, including sociology, social work, psychology, and biology. It explores the aging process of individuals and societies,

including the study of physical, mental, and social changes; the investigation of societal changes resulting from an aging population; and the application of this knowledge to policy and program development. To receive the B.A. Degree in Gerontology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### Student Learning Outcomes

- Exhibit an understanding of the content of the field, including theory and methods.
- Exhibit an ability to apply the concepts of the field to social issues.
- Exhibit an ability to think critically.
- Exhibit an understanding of social research, including the ability to apply research findings to social issues.
- Exhibit an ability to organize knowledge, ideas, evidence, information, and argument.
- Exhibit an ability to use library, internet, and community resources.
- Exhibit effective written and verbal communication.

#### Core Requirements (19 credits)

HSAD 401 Health Aspects of Aging (3)

PARA 416 Elder Law (3)

PHIL 311 Morals and Medicine (3)

PSY 403 Adulthood and Aging (3)

SOC 308 Social Gerontology (3) **or**

SW 308 Social Gerontology (3) **or**

WS 308 Social Gerontology (3)

SW 410 Gerontology: Policy and Practice (4) **or**

SOC 410 Gerontology: Policy and Practice (4)

#### Restricted Electives (6 credits)

Students must earn at least six credits in research methods chosen from the following courses.

ECON 370 Quantitative Economic Analysis (3)

MATH 234 Introduction to Probability and Statistics (3)

PSY 230 Statistics for the Behavioral Sciences (4)

SOC 350 Methods and Statistics for Social Research (4)

SOC 351 Quantitative Methods (3)

SOC 352 Qualitative Methods (3)

SW 400 Research Methods in Social Work (3)

#### Electives (15 credits)

Students must choose fifteen credits from the following courses. Concordia and NDSU offer courses which may also be used as electives in the Gerontology major. Students should consult with the Gerontology Program Coordinator prior to making such substitutions. Complete course lists are available from the department.

ACCT 230 Principles of Accounting I (3)

ACCT 280 Legal Environment of Business (3)

ACCT 321 Employment Law (3)

ANTH 248 Ideas of Culture (3)

BIOL 236 Introduction to Microbiology (3)  
BIOL 323 Human Anatomy (4)  
BIOL 349 Human Physiology (4)  
COMH 315 Health Agencies and Services (3)  
ECON 305 The Economics of Poverty, Discrimination, and Inequality (3)  
FINC 340 Financial Management (3)  
FINC 360 Principles of Investment (3)  
HLTH 305 Introduction to Nutrition (3)  
HLTH 330 Disease Prevention (2)  
MGMT 260 Principles of Management (3)  
MGMT 451 Organizational Behavior (3)  
MKTG 270 Principles of Marketing (3)  
PARA 470 Government Benefits (3)  
POL 221 Minnesota State and Local Government (3)  
POL 340 Public Administration (3)  
POL 341 Public Policy (3)  
PSY 265 Health Psychology (3)  
PSY 463 Abnormal Psychology (3)  
SOC 120 Social Psychology (3)  
SOC 310 Dominant-Subordinate Group Relations (3)  
SOC 320 Sociology of the Family (3)  
SOC 375 Sociology of Health and Medicine (3)  
SOC 412 Sociology of Complex Organizations (3)  
SW 411 Chemical Dependency (3)

## **B.A. Degree in Sociology**

The sociology major focuses on the study of society, social inequality, organization, social problems, social institutions, and social interaction. As sociology majors, students investigate a wide range of topics such as minorities, family, crime, class, healthcare and religion. Students are encouraged to develop writing and social research skills, as well as a broad understanding of society and organization. To receive the B.A. Degree in Sociology, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

### **Student Learning Outcomes**

- Exhibit an understanding of the content of the field, including theory and methods.
- Exhibit an ability to apply the concepts of the field to social issues.
- Exhibit an ability to think critically.
- Exhibit an understanding of social research, including the ability to apply research findings to social issues.
- Exhibit an ability to organize knowledge, ideas, evidence, information, and argument.
- Exhibit an ability to use library, internet, and community resources.
- Exhibit effective written and verbal communication.

### **Core Requirements (25 credits)**

SOC 110 Introduction to Sociology (3)  
SOC 120 Social Psychology (3)  
SOC 210 Social Problems (3)

SOC 302 Social Theory (3)  
SOC 310 Dominant-Subordinate Group Relations (3)  
SOC 350 Methods and Statistics for Social Research (4)  
SOC 351 Quantitative Methods (3) **or**  
SOC 352 Qualitative Methods (3)  
SOC 450 Senior Seminar in Sociology (3)

#### Electives (18 credits)

Students must complete 18 credits of elective courses. Students may apply up to three credits of Cultural Anthropology or Criminal Justice courses toward the Sociology major with departmental approval. Students may apply up to three credits from readings courses (SOC 497) toward the major. Up to three internship (SOC 469) credits may be taken by Sociology majors, but these credits cannot be applied to the 43 credits required in the major.

#### **Minor in Gerontology – 25 credits**

Courses at Concordia or NDSU may be taken through the Tri-College University and substituted for SOC 308 and PSY 403. Please consult with the Gerontology Program Coordinator prior to attempting such substitution.

HSAD 401 Health Aspects of Aging (3)  
PARA 416 Elder Law (3)  
SOC 308 Social Gerontology (3)  
PSY 403 Adulthood and Aging (3)  
SOC 410 Gerontology: Policy and Practice (4)

Students must take nine elective credits from those listed below. Concordia and NDSU offer courses which may also be used as electives in the Gerontology minor. Students should consult with the Gerontology Major Coordinator prior to making such substitutions.

SOC 375 Sociology of Health and Medicine (3)  
PSY 317 Alcoholism and Drug Abuse (3)  
SW 411 Chemical Dependency (3)  
HLTH 305 Introduction to Nutrition (3)  
PARA 470 Government Benefits (3)

#### **Minor in Juvenile Justice – 22 credits**

The Juvenile Justice minor serves as one of the only juvenile justice minor programs in the United States. Students interested in working with juveniles through the courts, probation, and correctional facilities will benefit from this minor, as they will explore the juvenile justice system and delinquency through a cross-disciplinary approach. Although the minor is open to all MSUM students, sociology, criminal justice, education and social work majors may find the minor particularly useful in working with adolescents, as they will learn prevention and intervention strategies for dealing with at-risk youth and juvenile delinquents.

#### **Student Learning Outcomes**

- Establish a foundation of knowledge regarding the juvenile justice system.
- Establish a cross-disciplinary understanding of juvenile delinquency, childhood and adolescence.
- Develop critical thinking skills necessary to evaluate various models of justice used within the juvenile justice system.

CJ 201 Introduction to Juvenile Justice (3)  
CJ 301/SOC 301 Delinquent Behavior (3)  
CJ 200 Introduction to Criminal Justice (4)

Twelve credits of electives from the following list:

CJ 306 Gangs (3)  
SW 402 Child Welfare (3)  
SW 411 Chemical Dependency (3)  
SW 499 Grant Writing (3)  
PSY 275 Behavior Modification (3)  
PSY 317 Alcoholism and Drug Abuse (3)  
PSY 402 Child/Adolescent Psychology (3)  
PSY 417 Child Psychopathology (3)

### **Minor in Sociology – 24 credits**

SOC 110 Introduction to Sociology (3)  
SOC 210 Social Problems (3)

Students must take eighteen credits of Sociology electives.

## **Speech, Language, Hearing Sciences**

### **Speech/Language/Hearing Sciences Department**

**Murray Hall (218) 477-2417**

**Chair:** Mary Drake

**Faculty and Clinical Staff:** Richard Adler, Jill Bueckens, Lowell Buysse, Bruce Hanson, Joni Mehrhoff, Nancy Paul, MariBeth Plankers, Elaine Pyle, Rachel Stotts, Vicki Riedinger, Kris Vossler

The academic programs offered in Speech/Language/Hearing Sciences at Minnesota State University Moorhead are designed for students who are interested in the normal and disordered processes of human communication. A major in this area is part of the preparation for clinical, teaching, research or service careers in speech-language pathology, audiology, and communication science.

To practice as a speech-language pathologist the master's degree is the requirement for state licensure and national certification. A professional doctorate is required to practice as an audiologist. The title of the undergraduate major, Speech/Language/Hearing Sciences, suggests that it is a pre-professional degree designed to qualify students for admission to professional study at the graduate level at this or other universities.

The department has established clinical experience eligibility requirements. All students must meet these requirements before they provide assessment or treatment to individuals with communication disorders. The requirements are as follow:

- C- grade or better in all completed SLHS courses,
- a cumulative grade point average of 3.25,
- no outstanding grades of incomplete,
- supervised clinical observations
- completed speech and hearing screening



If a student does not meet the stated requirements they may initiate an appeal through the department's committee.

### **Pre-audiology emphasis**

Although the undergraduate program at other universities is usually the same for future speech-language pathologists and audiologists, the Speech/Language/Hearing Sciences Department at Minnesota State University Moorhead offers a pre-audiology emphasis. The purpose of the pre-audiology concentration is to allow students interested in a career in audiology to follow a program of studies better tailored to their interest.

The graduate (M.S.) major is the professional degree. Its title, Speech-Language Pathology, suggests that it is the clinical degree in this field. Students completing the graduate program are qualified for clinical positions in communication disorders throughout the nation. Minnesota State University Moorhead's program is accredited by the Council on Academic Accreditation in Audiology and Speech Language Pathology (CAA) of the American Speech Language Hearing Association (ASHA).

Admission to any graduate program at Minnesota State University Moorhead is limited to those who qualify by virtue of their undergraduate grade point average, Graduate Records Examination score, and recommendations. Additional details about graduate study may be found in the *Graduate Bulletin*. Students who plan to seek clinical positions in schools should complete any additional requirements established by the credentialing authority in the states where they would seek employment.

### **B.S. Degree in Speech, Language, Hearing Sciences**

To receive the B.S. Degree in Speech-Language-Hearing Sciences, the student must meet the minimum university requirements and specific requirements for the program. Completion of 120 credits is required for this degree which includes the Liberal Arts and Sciences Core (42 credits).

#### **Student Learning Outcomes**

- Students will demonstrate knowledge of basic human communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the nine areas noted in the standard.
- Students will demonstrate knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, physiological, developmental and linguistic and cultural bases, as well as the ability to integrate information pertaining to normal and abnormal human development across the life span.
- Students will demonstrate knowledge of cultural competence/sensitivity.
- Students will demonstrate evidence of knowledge of standards of ethical conduct.
- Students will demonstrate skills in oral or other forms of communication sufficient for entry into graduate programs.
- Students will demonstrate knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.
- Students will demonstrate skills in written or other forms of communication sufficient for entry into graduate programs.

#### **Core Requirements (49 credits)**

SLHS 101 Survey of Speech-Language-Hearing Disorders (3)

SLHS 150 Observation of the Practice in Speech Language Hearing Sciences (2)  
SLHS 201 Linguistic Phonetics (3)  
SLHS 202 Anatomy and Physiology of Normal Speech and Hearing (3)  
SLHS 204 Language Development (3)  
SLHS 320 Hearing/Vestibular Disorders & Assessment (4)  
SLHS 321 Speech Sound Disorders in Children (3)  
SLHS 322 Language Disorders in Children (3)  
SLHS 343 Clinical Procedures (3)  
SLHS 427 Augmentative and Alternative Communication and Literacy Acquisition (3)  
SLHS 402 Neuroanatomy/Physiology of Communication and Swallowing (3)  
SLHS 421 Speech and Voice Science (3)  
SLHS 424 Childhood Stuttering and Related Disorders (3)  
SLHS 448 Professional Issues and Clinical Practice Management (3)  
SLHS 473 Rehabilitation Audiology (4)  
SLHS 491 Research Applications in SLHS (3)

**Related Requirements (6 credits)**

ENGL 387 Technical Report Writing (3)  
MATH 234 Intro to Probability and Statistics (3)

**Electives (12 credits)**

SLHS 301 Sign Language and Deaf Culture I (3)  
SLHS 490 Topical Seminar in SLP (1-3)  
SLHS 497 Individual Study (1-3)

**Restricted Electives (3 credits)**

SLHS 446 Clinical Experience (3)

**Pre-Audiology Emphasis (9 credits)**

PHYS 105 Physics of Music (3)

Students must earn six elective credits from the following list of courses. These electives should be chosen in close consultation with a faculty advisor.

ACCT 230 Principles of Accounting I (3)  
CHEM 110 Fundamentals of Chemistry (3)  
CHEM 180 Introduction to Organic and Biochemistry (4)  
CHEM 185 Introduction to Organic and Biochemistry Lab (1)  
ECON 202 Principles of Economics I: Micro (3)  
MGMT 405 Small Business Management (3)  
PSY 348 Cognition and Perception (3)  
PSY 402 Child/Adolescent Psychology (3)  
PSY 403 Adulthood and Aging (3)  
SOC 308 Social Gerontology (3)  
SPED 225 Individuals with Exceptionalities (3)  
SPED 419 Biomedical Aspects (3)

## **Minor in Speech, Language, Hearing Sciences – 25 credits**

SLHS 101 Survey of Speech-Language-Hearing Disorders (3)

SLHS 201 Linguistic Phonetics (3)

SLHS 202 Anatomy and Physiology of Normal Speech and Hearing (3)

SLHS 204 Language Development (3)

SLHS 320 Hearing/Vestibular Disorders & Assessment (4)

Students must earn at least eight elective credits in SLHS courses. These courses are to be chosen in close consultation with a faculty advisor.

## **Course Listing**

### **Accounting**

#### ***[ACCT 230] Principles of Accounting I***

From a user's perspective, an introduction to the content and concepts underlying the three basic financial statements prepared by management for use by investors and creditors. Includes financial statement analysis.

#### ***[ACCT 231] Principles of Accounting II***

An introduction to the content and concepts of financial information for management's use in directing operations. Topics include cost behavior, product costing, actual and standard costs, cost-volume-profit analysis, relevant costs, operational and capital budgeting, and present value analysis.

#### ***[ACCT 280] Legal Environment of Business***

Introduction to the American legal system, legal and regulatory environment of business, ethics and social responsibility, contracts, agency, and business organizations.

#### ***[ACCT 290] Topics in Accounting***

This is a topical course and may be repeated when the topic changes.

#### ***[ACCT 306] Contracts and Business Entities***

Study of contracts, agency, business organizations (including all forms of partnerships, corporations and limited liability companies), and securities regulation.

#### ***[ACCT 321] Employment Law***

An exploration of the legal nature of the employment relationship including contract and liability issues and major stages of the employment relationship, including hiring, evaluation and termination. Coverage includes antidiscrimination law and the Family and Medical Leave Act. Same as PARA 321.

#### ***[ACCT 330] Intermediate Accounting I***

Review of the accounting process and basic financial statements. Analysis of conceptual framework, working capital and fixed assets. Research using the Financial Accounting Research System (FARS). May be taken concurrently with Acct 375 or Mgmt 370.

***[ACCT 331] Intermediate Accounting II***

Valuation and reporting of investments, liabilities, leases, inventory issues, and property, plant and equipment issues. Continues development of research skills using FARS.

***[ACCT 332] Intermediate Accounting III***

This third course in the intermediate sequence covers the topics of accounting for income taxes, pensions and other post-retirement benefits, shareholders' equity, share-based compensation and earnings per share, and the statement of cash flows. Students will also conduct FASB research using the Financial Accounting Standards Board online codification database.

***[ACCT 350] Cost Accounting***

Emphasis on costing systems, including job order and process costing, joint and operation costing, ABC, variable costing and standard costing with variance analysis.

***[ACCT 375] Accounting Systems***

Developing, organizing, and using accounting data in a computerized environment; emphasis on accounting applications using computerized spreadsheets, databases, and general ledger software.

***[ACCT 390] Topics in Accounting***

This course may be repeated since content may vary.

***[ACCT 407] Commercial Transactions, Property and Special Topics***

Detailed study of Uniform Commercial Code (sales contracts, commercial paper and secured transactions), creditors' remedies, bankruptcy, property (real, personal and intellectual), bailments, trusts and estates, insurance law and professional responsibilities.

***[ACCT 430] Advanced Accounting***

Study of consolidations, partnerships, and other advanced topics. Continues development of research skills using FARS.

***[ACCT 432] Advanced Accounting II***

This course presents various advanced topics in accounting. Topics may include: foreign currency transactions, translation of foreign currency financial statements, International Accounting standards, Accounting for liquidation, accounting for estates and trusts, and accounting for governmental and nonprofit entities. Course coverage may be modified to reflect current issues in the accounting area.

***[ACCT 441] Tax Accounting I***

Outline of federal tax system. Introduction to concepts of gross income, exclusions, deductions, alternative minimum tax, tax credits, tax payment procedures, property transactions, accounting periods, accounting methods, deferred compensation, corporations and partnerships.

***[ACCT 443] Tax Accounting II***

Advanced topics in taxation, including income tax planning and income tax return preparation for corporations, S corporations, partnerships, limited liability companies, exempt entities, estates and trusts.

***[ACCT 446] Estate, Gift and Trust Taxation***

Federal estate and gift tax; income taxation of estates and trusts; fundamentals of estate planning. Same as PARA 446.

***[ACCT 460] Audit I***

Coverage includes the theory of auditing, generally accepted auditing standards, audit reports, quality control, ethical decisions, accountants' liability, fraud detection, audit objectives and procedures, management assertions, audit planning analytical review, risk analysis, internal control evaluation, and tests of controls.

***[ACCT 461] Audit II***

Coverage includes the concepts of testing balances, auditing by cycles, audit sampling and applications, and compilation and review engagements. There will be additional coverage of generally accepted auditing standards, audit reports, quality control, fraud detection audit objectives and procedures, management assertions, audit planning, analytical review, risk analysis, internal control evaluation, and tests of controls. The course will include an integrated audit case.

***[ACCT 469] Internship***

A supervised practical experience in accounting. A maximum of 12 internship credits may be applied to the degree.

***[ACCT 490] Topics in Accounting***

This course may be repeated since content may vary.

***[ACCT 497] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

**American Multicultural Studies**

***[AMCS 100] America's Mosaic***

This course is an introduction to the cultural experiences of historically underrepresented cultures in the U.S. (African American, American Indian, Hispanics, and Asian Americans). The purpose of this course is to make sense of the diversity between and within cultures. MnTC Goal 2.

### ***[AMCS 209] African American Humanities I: Roots***

This course offers a survey of selected aspects of the arts and humanities of African Americans from multidisciplinary perspectives. Beginning with the fundamental cultural resources of African traditional roots and American slave experiences, we trace their cultural legacies through the historical, cultural, artistic, expressive and aesthetic dimensions of the lives of Black people in the U.S. through the Civil War. Students will be expected to recognize and understand the critical links between Blacks' experiences as Americans and their aesthetic and cultural expressions. They will be required to critically integrate information from readings with classroom presentations and discussions. MnTC Goal 6.

### ***[AMCS 210] African American Humanities II: 1865-Present***

This course offers a survey of selected aspects of the arts and humanities of African Americans from multidisciplinary perspectives. Beginning with the hope for new opportunities after the end of slavery to the 21st century, we trace the struggles and aspirations of African Americans through the historical, cultural, artistic, expressive and aesthetic dimensions of their lives in the U.S. Students will be expected to recognize and understand the critical links between Blacks' experiences as Americans and their aesthetic and cultural expressions. They will be required to critically integrate information from readings with classroom presentations and discussions. MnTC Goal 6.

### ***[AMCS 220] Asian-American Experience***

This course studies the changing images of Asians in America, and discusses how race, class, and gender have shaped the experiences of different Asian ethnic groups. MnTC Goal 7.

### ***[AMCS 233] Education and Multicultural America***

This course provides an introduction to multicultural perspectives on American education. Given that the United States is becoming more culturally diverse and operates within an increasingly globalized world, citizens need to be equipped to understand the diverse cultures with which they work and interact. This course exposes students to the experiences and challenges of African Americans, American Indians, Chicano/Latinos and Asian Americans in the U.S. educational system from historical and contemporary perspectives. The course content both demystifies stereotypes and myths attributed to these groups and stresses the marvelous complexity and diversity of these groups as they seek equitable access to quality education. MnTC Goal 7.

### ***[AMCS 300] Theories and Methods in American Multicultural Studies***

This course is an introduction to theories, issues and research methodologies in American Multicultural Studies. This course is open to majors and minors who have successfully completed at least two AMCS courses.

### ***[AMCS 302] Latinos of the Caribbean: Cuba, Dominican Republic, and Puerto Rico***

This course explores the economic, political, and cultural globalization of the Spanish Caribbean from an interdisciplinary, analytical, and historical framework. The impact of globalization is examined through migration (economic and political) and remittances; emergence of transnational societies; political

transnational movements such as the Generation Y, the Cuban blog; and cross-border exchanges in cultural trends. MnTC Goal 8.

***[AMCS 303] Latinos in the United States***

An interdisciplinary study of the diversity of the culture, history, economic and political situation of the Latino population in the United States. MnTC Goal 7.

***[AMCS 312] Origins of Multicultural America***

This course is an introduction to the interdisciplinary study of multicultural America. This course looks at the history of multicultural America beginning before European contact with Native peoples and continuing through the Civil war. Course materials are drawn from disciplines such as humanities, social sciences, literature, philosophy, and the arts. MnTC Goal 5.

***[AMCS 315] African American Images in Film***

This course is a broad survey of selected 20th/21st century films by and for African Americans. It introduces students to filmmakers, actors, and themes in African American film. Through this course, students explore the aesthetic dimensions of film as a medium of African American creative and political expression. MnTC Goal 6.

***[AMCS 320] American Indian Belief Systems***

American Indian Belief Systems focuses on common thematic elements found throughout diverse American Indian communities. This course introduces the students to the philosophies, knowledges, languages, and spiritual beliefs of indigenous peoples in the Americas using a variety of texts and audiovisual materials from the humanities and social sciences as well as oral histories, interviews, and personal narratives. In this course students will critically examine issues surrounding the resistance, loss, reclamation, and revitalization of Indigenous cultures, knowledges, religions, and languages. MnTC Goal 7.

***[AMCS 325] African American Theatre***

Survey of selected plays by African American writers from the 19th and 20th centuries. Focus on aesthetic and interpretative dimensions grounded in African American historical and cultural contexts. Amcs 210 or 211 or Thtr 220 are highly recommended as prerequisites. MnTC Goal 6.

***[AMCS 368] Transnational Asian Adoption***

This course examines Asian adoption and the experience of Asian adoptees in America over the past 50 years. It centers on the experience of Asian adoptees focusing largely on the social and cultural production this ever-growing population. Using the Cold War as a historical baseline, the course considers the geopolitical and socioeconomic relationships between the United States and South Korea, China, Vietnam and India during and since the Cold War that have shaped the history of Asian adoption. In addition we will make historical and political connections between Asian adoption, transnational adoption, and domestic trans-racial adoption within the United States. MnTC Goal 8.

***[AMCS 372] Dynamics of Prejudice and Oppression***

An examination of theoretical dimensions, dynamics and consequences of prejudices and oppression based on race, class, gender, and ability. Students will be expected to recognize, critically analyze and identify both shared and unique structural dimensions of various forms of oppression and discuss potential strategies for dismantling oppression. MnTC Goal 7.

***[AMCS 390] Topics in American Multicultural Studies***

Exploration of a specific American Multicultural Studies topic. This course may be repeated as topic varies.

***[AMCS 461] Readings: American Multicultural Studies***

Independent reading and research.

***[AMCS 469] Internship***

A supervised, practical experience in the field. A maximum of 12 internship credits may be applied to the degree.

***[AMCS 492] Capstone Seminar in AMCS***

As a capstone requirement, students will demonstrate their mastery of interdisciplinary research skills through the development of a research project on a given seminar theme in American Multicultural Studies. This is the designated writing intensive course for our major. Throughout this course students will have to complete short, informal writing assignments. They are also required to complete formal, polished writing assignments throughout the course including: response papers and one term paper. Themes vary each year. Possible themes are: Civil Rights, Education, Popular Culture, Folklore, Women's studies, Interracial Relationships, Multicultural Imaging. This course is open to majors of junior/senior standing and minors with permission.

***[AMCS 497] AMCS Independent Study***

AMCS Independent Study course

**Animation**

***[ANIM 113] MAYA***

The course structure revolves around the areas of solid modeling, organic modeling, lighting, texturing and basic animation. Interaction with Mud Box, 3DS Max and Motion Builder is also presented in the course as well as special effects and video compositing.

***[ANIM 216] 3D Modeling***

3D Modeling is a course about building 3D CAD models for a variety of disciplines. Forensic animators use these models to demonstrate how accidents happen. Engineers use them to show how machines and systems work. Architects use them to let their clients participate in the design process. Video game developers use them to create virtual worlds populated with people, places, and things that exist only in the imagination (Same as TECH 216).

***[ANIM 316] 3D Animation***



Study of animation techniques used in the graphic communications industry. Prime emphasis is on using 3D Studio Max software to design and animate scenes of various complexity.

***[ANIM 366] Motion Graphics***

Continued practical study of interactive 3D, audio, and motion graphic applications used in the multimedia industry. Emphasis is on production processes, game UI, DVD-CD ROM, Web processes.

***[ANIM 416] Animation Studio***

Advanced study in 3D Graphic Applications such as 3D Studio Max and MAYA, on both Mac and Windows platforms. Study includes animation, sound, video, Special FX, Game UI, and Virtual World Development.

***[ANIM 469] Internship***

Internship in Animation

**Anthropology**

***[ANTH 100] Debating Humankind***

Designed to instruct students in critical thinking skills using multicultural examples spanning time and space. Students will review and engage in a series of debates, including among others, topics on race, the importance and nature of science, cultural norms, how humans are different from other animals, and the validity of research methods presently used in social science. MnTC Goal 2.

***[ANTH 110] Introduction to Cultural Anthropology***

Introduction to the concept of culture and to the study of language. MnTC Goal 8.

***[ANTH 115] Introduction to Archaeology***

Review of archaeological study with special emphasis on the interdisciplinary nature of archaeology. Archaeological methods and techniques are explained as aspects of the process of discovery. Introduction to the major phases in human culture history from the earliest toolmakers to the rise of civilization. MnTC Goal 5.

***[ANTH 120] Introduction to Physical Anthropology***

A survey of the field of physical anthropology. The course will include a review of the fossil record, concentrating on theories about human evolution. Other topics include taphonomy, primate behavior and taxonomy, and the origins of contemporary human variation. MnTC Goal 3.

***[ANTH 202] American Indian Culture***

A historical perspective on living, traditional cultures of American Indian groups. Topics include tribal entities, religion, arts, life-styles and ecological adaptations. MNTC Goal 7.

***[ANTH 217] The Rise of Civilization***

Examines the origins of agriculture and civilization, with special attention to a comparison of long-term cultural developments in the Old World and New World. MnTC Goal 5.

***[ANTH 248] Ideas of Culture***

Examination of some of the major ideas in the history of anthropology from the 19th and 20th centuries. This will include concepts such as evolution, culture, structure, function, and relativism.

***[ANTH 265] Language and Culture***

The relationship between language and culture with emphasis on historical linguistics, sociolinguistics, psycholinguistics, and ethnolinguistics. MnTC Goal 5.

***[ANTH 290] Topics in Anthropology***

Topics from the sub disciplines of anthropology.

***[ANTH 300] Contemporary Archaeology***

An overview of the practice of archaeology emphasizing methods, theoretical foundations, and the role of cultural resource management in contemporary society.

***[ANTH 301] Archaeological Prospection***

Examination of geophysical prospecting methods available for archaeological research. Emphasis on the conceptual basis of different prospecting methods and their application in archaeological and geotechnical studies. Hands-on experience with geophysical instruments. Same as GEOS 301.

***[ANTH 303] Cross Cultural Gender***

A survey of gender roles in various cultures. This class examines the relationship of gender to kinship, economics, political and biological factors. It also addresses culture change and the effect on gender role assignments.

***[ANTH 306] Medical Anthropology***

A survey of the distributions of illness throughout the world with emphasis on the definitions, treatments, and practitioners as well as the cultural settings producing them. MnTC Goal 8.

***[ANTH 307] Ecological Anthropology***

An anthropological examination of cultural adaptation to the environment. Detailed analysis of the major human subsistence strategies in diverse ecological settings worldwide. MnTC Goal 10.

***[ANTH 308] Migration and Human Adaptation***

An examination of migration as an adaptive strategy used by people in adjusting to changing conditions in their environment. Explores types of migration as well as motivations and consequences of human movement in both the past and present and around the world. Same as INTL 308. MnTC Goal 8.

### ***[ANTH 309] Indians of the Great Plains***

This course focuses on past and present cultures of Plains Indians. Individual tribal traditions are compared and contrasted. The interdependence of techno-environment, socio-political organization and ideology is stressed, with emphasis on culture change. Present day adaptations to reservation and urban life are examined. MnTC Goal 7.

### ***[ANTH 311] American Indians and the Environment***

To what degree does the image of the "ecological Indian" faithfully reflect American Indian ideas about the environment through time? This course will examine the idea of the "ecological Indian," the idea of American Indians were/are model ecologists and conservationists. We will explore the concept of sustainability among American Indians and the relationship between American Indian communities and the environment through an examination of their unique adaptations that they have made within the 10 major geo-cultural regions of native North America: Arctic, Subarctic, Great Basin, Plateau, Northwest Coast, California, Great Plains, Northeast and Southeast. MnTC Goal 10.

### ***[ANTH 312] Anthropology of Tourism***

Anthropological examination of the global tourist industry, with particular emphasis on impacts on local populations and ecosystems. The ethical dimensions of tourism will be the primary concern in this course. Case studies will be used to illustrate principles of sustainable, responsible, participatory tourism. MNTC Goal 9.

### ***[ANTH 313] Understanding Contemporary Africa***

This course examines societies and cultures of contemporary Sub-Saharan Africa to promote a better understanding of the continent's place in the global system. MnTC Goal 8.

### ***[ANTH 314] American Indian World Views***

This course examines the cultural knowledge of American Indian groups that they employ to understand the world around them. It examines their belief systems, religious rituals, oral traditions, and cosmologies. MnTC Goal 7.

### ***[ANTH 315] North American Archaeology***

An overview of the prehistory of North America from the end of the Ice Age.

### ***[ANTH 316] Magic, Witchcraft and Belief***

Introduction to the study of religion in cross cultural perspective. The origins of supernatural beliefs will be studied. Functional and non-functional explanations of religious beliefs will be examined. The relationship between culture change and religious movements will be explored. MnTC Goal 8.

### ***[ANTH 317] Collapse***

This course explores the notion of societal collapse using ancient societies and archaeological data. A variety of case studies, drawn from diverse cultural and environmental settings, are examined to identify the processes and causes of collapse. Of critical importance is the interplay between society and environment in achieving or failing to attain long-term sustainability. Present day contexts are examined using perspectives gained from the study of the past. MnTC Goal 10.

***[ANTH 325] Reading Landscape: Ways of Seeing***

Explores the landscape concept as developed and applied within anthropology and the geosciences. Considers the interaction of culture and perception in the way we view our physical world. Writing Intensive.

***[ANTH 327] The Aztecs***

This course is an examination of Aztec civilization. Varied perspectives, including native and Spanish chroniclers, archaeological data, and a cross-cultural understanding of archaic states, are employed to derive an understanding of Aztec civilization. MnTC Goal 7.

***[ANTH 329] The Uses of the Past***

An examination of how the past is interpreted to satisfy ideological, political and social needs of groups. Ethical responsibilities related to interpreting the past are combined with understanding the importance of being fair-minded toward others' versions of the past. MnTC Goal 9.

***[ANTH 333] Anthropology of Music***

An anthropological investigation of the relationships between culture and music. It will focus on the core anthropological concepts of cultural relativism, ethnocentrism, and globalization in relation to the cultural contexts of music. It will explore how music relates anthropologically to various aspects of culture, including identity, gender, family, religion, politics, subsistence, economics, and language. Ethnographic examples will be drawn from western and non-western music. MnTC Goal 8.

***[ANTH 337] The Maya***

This course explores the archaeology of the Maya. Varied perspectives, including native, Spanish chroniclers, the archaeological record, and a cross-cultural understanding of archaic civilizations, are employed to derive and understanding of Maya civilization.

***[ANTH 350] Geoarchaeology***

Examines the application of Geoscience methods and techniques to archaeological deposits and materials. Emphasizes foundational concepts in Geoarchaeology, the role of Geoarchaeology in contemporary archaeology, and the application of geoarchaeological knowledge and skills to inform archaeological interpretation.

***[ANTH 360] Applied Ethnographic Methods***

Training in the standard techniques of ethnographic fieldwork with emphasis on applied applications, including research design, interviewing, forms of observation, and the production of ethnographic writings, as well as introducing important debates concerning this process.

### ***[ANTH 380] Traditional Cultures***

An examination of traditional cultures before widespread westernization, including a review of the anthropological literature, such as ranking, non-market exchange and systems of production, domestic organization, power, authority, and traditional religious systems.

### ***[ANTH 390] Topics in Anthropology***

Study of various topics in anthropology. This course may be repeated as topics vary.

### ***[ANTH 450] Field Work in Anthropology***

An applied course in archaeology involving excavations at archaeological sites during the summer months. Emphasis on field techniques including map reading, photography, excavation techniques, artifact processing and analysis.

### ***[ANTH 451] Archaeology Lab***

Laboratory training in archaeology including inventory, treatment and curation of collections, basic laboratory drawing, photography, data entry and reporting. Students will work on collections from regional archaeological sites.

### ***[ANTH 455] Field Methods in Geoarchaeology***

Provides field experience with a variety of geoarchaeological techniques applied within the context of an interdisciplinary research program. Research design and the research process will also be emphasized. In addition to the listed pre-requisite, students must have taken at least one introductory course in geology. Same as GEOS 455.

### ***[ANTH 469] Internship***

A supervised, practical experience in the field. A maximum of 12 internship credits may be applied to the degree.

### ***[ANTH 492] Seminar in Anthropology***

Selected topics in Anthropology. Students are expected to do research in subjects related to the topic of the course. May be repeated when topic varies.

### ***[ANTH 497] Research in Anthropology***

Research in anthropology under the supervision of a member of the faculty.

## **Art**

### ***[ART 101] Foundation Drawing I***

Introduction to visual elements through various drawing media, emphasizing accurate observation of still-life, nature and the figure.

### ***[ART 102] Foundation Drawing II***

Visual inquiry using representational and imaginative studies. Use of composition, color and contemporary concepts of drawing emphasized.

### ***[ART 125] Foundation Design***

Introduction to elements and principles of visual language, color, form/shape, line, space and texture as they relate to basic design. The course will include an introduction to constructive, perceptual, symbolic and expressive aspects of color within a variety of relationships.

### ***[ART 170] Art Appreciation: Content and Form***

Designed for non-art majors, this course introduces basic visual arts vocabulary and design concepts. The course also provides a historical framework and introduction to the diverse media in the visual arts. MnTC Goal 6.

### ***[ART 203A] Introduction to Ceramics and Clay Processes***

An introduction to the technical and aesthetic issues involved in working with clay. The course covers the fundamental techniques used on the potter's wheel and in handbuilding with clay. Slip work and glazing are also covered.

### ***[ART 203C] Introduction to Painting***

Study of basic materials, techniques, and formal issues of painting. Topics include historical and contemporary painting approaches. Emphasis on oil and acrylic painting media.

### ***[ART 203D] Introduction to Printmaking***

An introduction to relief printing, intaglio, lithography and serigraphy.

### ***[ART 203E] Introduction to Sculpture***

Survey of basic materials, methods, techniques, and concepts associated with space and sculptural forms. Topics include wood and steel construction and fabrication, bronze casting, and mold making.

### ***[ART 203F] Introduction to Photography***

Introduction to photographic equipment, materials, processes, and philosophy. Includes experiments with paper, film, small camera operation, roll-film processing, enlarging, mounting, and matting.

### ***[ART 203H] Introduction to Drawing Concepts and Methodologies***

Survey of methods, concepts, and techniques of traditional and contemporary drawing. Topics include figure drawing, perspective, digital drawing fundamentals, and contemporary drawing methodologies.

### ***[ART 203K] Introduction to Fiber/Textile Design***

Introduction to a variety of surface and three-dimensional design techniques as they apply to textiles and fiber materials and forms. Printing on fabric, dying, batik, applique, weaving, basketry, felting and papermaking will be explored. A survey of textile history and past and contemporary artists is also addressed.

***[ART 203L] Introduction to Illustration***

Study of basic concepts of pictorial illustration. Traditional and contemporary trends in image making also adaptable for publishing in narrative. Content exploration in the areas of advertising, editorial and scientific illustration.

***[ART 203N] Introduction to Papermaking***

Survey of materials, methods and techniques of hand papermaking.

***[ART 233] Global Art History I***

This course examines the major developments in architecture, sculpture, painting, and the decorative arts worldwide, from prehistory through the Middle Ages. In addition to cross-cultural comparison of diverse traditions and histories of art, the course will introduce the student to important vocabulary and methods fundamental to the discipline of art history. Art & Design majors should be simultaneously enrolled in Art 233M Global History of Art I: Methods. MnTC Goal 8.

***[ART 233M] Global Art History I: Methods***

In this course students apply the art historical concepts and methods from Art 233 lecture course. It reinforces the knowledge of methods unique to the art historical discipline including informed observation of physical objects combined with historical and formal analysis. Students are shown how to find appropriate research materials in the discipline and how to apply them in a contextual comparative essay. Art & Design majors should be simultaneously enrolled in Art 233.

***[ART 234] Global Art History II***

This course examines the major developments in architecture, sculpture, painting, illustration, the decorative arts, and craft worldwide, from approximately the 13th century to the Modern Age. In addition to cross-cultural comparison of diverse traditions and histories of art, the course will introduce students to important concepts and methods fundamental to the discipline of art history. Art & Design majors should be simultaneously enrolled in Art 234M: Global Art History II-Methods. MnTC Goal 8.

***[ART 234M] Global Art History II: Methods***

In this course students apply the art historical concepts and methods from Art 234 lecture course. It reinforces the knowledge of methods unique to the art historical discipline including informed observation of physical objects combined with historical and formal analysis. Students are shown how to find appropriate research materials in the discipline and how to apply them in a contextual comparative essay. Art & Design majors should be simultaneously enrolled in Art 234.

***[ART 270] Visual Culture: Practices in Critical Looking***

This course explores how different visual media from fine art, mass media, science and everyday life intersect to form a cultural discourse, and develops ways to critically observe and engage this discourse. Different ways of seeing and interpreting visual images (from painting, advertisements, graffiti, tattoos, maps, film, social media, architecture etc.) will be developed. Visual imagery interpreted in different media and contexts will be investigated as they correlate with political and social power, globalism, gender, race, sexual identity, space, and other social questions and institutions.

***[ART 290] Topics in Art***

Studio, seminar or discussion of topics not included in other art courses. Up to three credits may be applied to the major.

***[ART 300A] Individualized Studies in Ceramics***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300C] Individualized Studies in Painting***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300D] Individualized Studies in Printmaking***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300E] Individualized Studies in Sculpture***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300F] Individualized Studies in Photography***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300H] Individualized Studies in Figure Drawing***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300I] Individualized Studies***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300J] Individualized Studies in Art Education***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300K] Individualized Studies in Fiber/Textiles***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 300L] Individualized Studies in Illustration***



Individualized instruction in media not regularly offered in studio concentrations.

***[ART 303A] Intermediate Pottery/Wheel Throwing***

An in-depth investigation involving the skills, techniques, and aesthetics of forms thrown on the potter's wheel. Exercises in decorating as well as firing are included. Students may take 303A, 304A, and 305A in any order.

***[ART 303C] Painting: Technique, Color and Composition***

Emphasis on technical skills, color strategy and compositional methods. The class projects are designed for developing students' personal subject matter. Specific paint applications and technical information will be provided in order to develop painting skills.

***[ART 303D] Printmaking: Relief, Paper, Book***

Students will explore an intermediate level of printmaking focusing on expanded techniques in relief printmaking, as well as exploring some bookbinding and papermaking. Assignments will allow students to incorporate other techniques and concepts of their choosing, but at least, in part, will address some of the techniques in relief printmaking and book arts in contemporary and historical applications.

***[ART 303E] Sculpture: Technique and Object Making***

This course expands on furthering student's skill level with tools and technical abilities. The course will emphasize the exploration of object making while assisting the development of a conceptual vocabulary.

***[ART 303F] Contemporary Digital Concepts***

This course is dedicated to the expanded exploration of digital image making processes and alternative methods of display with an emphasis on photographic concepts and contemporary digital practices.

***[ART 303H] Perceptual Drawing***

Emphasis on observational drawing and realism in traditional media. Scientific/botanical illustration, human figure/anatomy, and other realist subjects addressed. Each student completes an extended project in primary subject of interest. May be repeated for up to 8 credits.

***[ART 304A] Intermediate Handbuilding/Ceramic Sculpture***

This course delves into the techniques of producing larger sculptural objects as well as conceptual approaches to sculpture. The course also introduces the use of paperclay and alternative surface effects appropriate to sculptural work. Students may take 303A, 304A, and 305A in any order.

***[ART 304C] Painting: Portraiture***

Refinement of technical facility and concentration on the subjects of portraiture and figure painting. Study of portraiture/figure painting and their compositional strategies. In-depth studio investigation in historical and contemporary portrait/figure painting. Students may take ART 303C, 304C and 305C in any order.

### ***[ART 304D] Printmaking: Intaglio and Photo-based Printmaking***

Students will explore an intermediate level of printmaking focusing on expanded techniques in intaglio printmaking and photo-based applications. Assignments will allow students to incorporate other techniques and concepts of their choosing, but at least, in part, will address intaglio and photo-based printmaking in contemporary and historical applications.

### ***[ART 304E] Sculpture: Installation and Space***

This course will explore the use space, site and place. The goal of the course is to assist students in the utilization three-dimensional space beyond the object to actualize fully realized works of art.

### ***[ART 304F] Experimental Techniques in Photography***

This course is dedicated to understanding an expanded definition of the photographic medium from both an historical and interdisciplinary viewpoint. Explorations can include early photographic processes, new and mixed media processes with a core photographic component, and both lens and non-lens based forms of image making.

### ***[ART 304H] Contemporary Drawing Concepts and Methodologies***

Emphasis on interdisciplinary and multi-media approaches to drawing. The boundaries of "drawing" will be pushed. Non-representational and representational subjects explored. May be repeated for up to 8 credits.

### ***[ART 305A] Technical Ceramics***

Explores the fundamentals of glaze and clay chemistry with an emphasis on glaze development and coloration. Students also investigate firing theory, image transfers, mold making and slip casting. Students may take 303A, 304A, and 305A in any order.

### ***[ART 305C] Painting: Abstract and Mixed Media***

Emphasis on the historical, theoretical and conceptual development of abstraction. Further understand color theory, elements of art and principles of design as basics for abstraction. Personal subject matters will include landscape, human figure, architectural, interior space or non-objective. Students may take ART 304c and 305c in any order.

### ***[ART 305D] Printmaking: Planographic and Digital Applications***

Students will explore an intermediate level of printmaking focusing on expanded techniques in lithography, screen-print, and digital applications. Assignments will allow students to incorporate other techniques and concepts of their choosing, but at least, in part, will address lithography, screen-print, and digitally-based printmaking in contemporary and historical applications.

### ***[ART 305E] Sculpture: Concepts in Materiality***

This course will explore the use of materials and making processes to realize a finished work of art. There will be an exploration of the conceptual, formal, and poetic implications of different materials in art-making.

### ***[ART 305F] Untrue Narrative***

This course is dedicated to the deconstruction of photography as a truthful medium through the use of fabricated narratives. Explores notions of self-contained narratives, as well as, linear and nonlinear visual storytelling in photography.

### ***[ART 305H] Sequential Art***

This course investigates strategies for visual storytelling. Students will explore both traditional and contemporary two-dimensional media. May be repeated for up to 8 credits.

### ***[ART 305L] Digital Illustration***

This course addresses the tools and techniques of producing digital illustrations. Students will learn the use of appropriate software and hardware to create digital and hybrid hand-drawn/digital illustrations.

### ***[ART 306A] Ceramics Studio***

Assignments, readings and individual contracts are employed encouraging students to seek their own voice and direction in ceramics, preparing them to continue as active individually expressive artists after graduation.

### ***[ART 306C] Painting: Watercolor***

Watercolor Media Painting, an intermediate course emphasizes on experiencing in the basic techniques of watercolor and also introducing a variety of experimental approaches. Student will work toward a high degree of personal expression and to investigate ideas which occur during the course of study. Slide lecture, demonstration and class discussion is utilized; instruction is based on both structured class and an individual project research assignment. Students may take ART 303C, 304c, 305c and 306c in any order.

### ***[ART 306D] Experimental Printmaking Methods***

This course focuses on concepts and applications of printmaking methodologies. The concepts in this semester will explore printmaking substrates, printmaking materials, time-oriented work, public and space considerations with regards to printmaking issues in contemporary art. This course will allow for cross-over between disciplines such as ceramics, sculpture, time-based media, theater and/or video.

### ***[ART 306E] Concepts in Contemporary Sculpture***

This is studio class that will have lectures that address major issues in contemporary sculpture. Students will explore these issues in their own making practice.

### ***[ART 306F] Identity in Photography***

This course is dedicated to the continued exploration of the conceptual and practical aspects of both black and white and color photography with an emphasis on self-portraiture as a means of deconstructing concepts of identity.

### ***[ART 311] Pottery: Principles of Production and Design***

This course is designed for non-art majors interested in exploring the creative process and how the art and craft fields approach creativity, production and problem solving. Students will gain a basic understanding of the fundamental production methods employed in the creation of ceramic pottery as well as foundational design principles and creative decision making processes. MnTC Goal 6.

***[ART 320] Philosophy of the Arts***

Philosophical questions in fine arts. Topics include the nature of art and aesthetic experience and criticism. Same as PHIL 320. MnTC Goal 6.

***[ART 325] Introduction to Art Therapy***

This course will present an introductory experience to the creative process as visual expression using a variety of media and approaches to art therapy. This course will introduce art therapy history, theory, principles and practice. Students will explore the professional field and ethical issues related to art therapy. Cross listed with PSY 325.

***[ART 338] Non-Western Art***

Survey of the principal art forms of Non-Western cultures, with emphasis on their cultural and philosophical context. Topics vary, but may include consideration of the art forms of Africa, Oceania, Pre-Columbian America, as well as India, China and Japan.

***[ART 345] Art of Social & Environmental Justice***

This course explores the role of visual artists in imaging and contributing to a more socially just, inclusive, and environmentally ethical world. It explores the works of artists and communities who utilize visual art to both catalyze tangible change and activate awareness around social, environmental, and animal justice. MnTC Goal 9.

***[ART 350] Methods and Materials: Art for the Elementary Classroom***

Students investigate materials and techniques for creating meaningful expression in the visual arts. Theoretical topics include: developmental stages of children's art making, lesson planning, curriculum development, assessment, organizing museum/gallery experiences for children and integrating art into the elementary curriculum.

***[ART 375] Art Methods 7-12***

A preparatory course for art teachers, required for students majoring in Art Education. The course focuses on current practices in secondary art education, curriculum development, DBAE lesson planning, classroom management, assessment, and application of Minnesota and National Standards for learning in the Visual Arts.

***[ART 390] Topics in Art***

Studio, seminar or discussion of topics not included in other art courses. This is a topical course and may be repeated when the topic changes.

***[ART 398] Gallery Management***

This course is an exploration of methods and practices involved in the presentation and interpretation of visual art work in both traditional and not-traditional spaces. Students will be required to analyze, synthesize and evaluate knowledge from several disciplines. Students must be of junior status or higher, have a keen interest in the promotion of the visual arts, and have basic knowledge of at least two of the following areas; printmaking, ceramics, drawing, painting, photography, sculpture, graphic design, art history, or have consent from the instructor.

***[ART 400A] Individualized Studies in Ceramics***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400C] Individualized Studies in Painting***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400D] Individualized Studies in Printmaking***

Further development of conceptual and formal qualities of creative work in a selected printmaking media such as relief printing, intaglio printing, lithography or serigraphy, with emphasis on consistency of small editions. The scope of the work and media will be determined in a contractual agreement between the student and instructor. Students are required to have earned 8 credits in Art 300D prior to enrolling in this class.

***[ART 400E] Individualized Studies in Sculpture***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400F] Individualized Studies in Photography***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400H] Individualized Studies in Figure Drawing***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400I] Individualized Studies***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400J] Individualized Studies in Art Education***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400K] Individualized Studies in Fiber/Textiles***

Individualized instruction in media not regularly offered in studio concentrations.

***[ART 400L] Individualized Studies in Illustration***

Individualized instruction in media not regularly offered in studio concentrations.

### ***[ART 402] Advanced Methods: Art Education***

The primary intent and first half of this course focuses on ensuring that students are prepared to enter a classroom or other educational setting armed with the most current, relevant and practical classroom management strategies and teaching methodologies. This course will focus on what it means to be a professional career educator, advocate and leader in the field of art education. Students will learn about professional portfolio preparation, art career exploration and investigate the most current, relevant and effective uses of technology. The second half of the course is to provide opportunities for students to tailor their education to investigate areas of personal interest within art education related fields. Students will be allowed to choose between flexible units of study and experiences. Students have the opportunity to spend 30-60 hours in visual art related service learning practicum settings (30 partner agencies) of their choice or they may choose between a variety of other units of study and research such as Educational Technology, Crafts in the classroom, Arts Advocacy, Public art, Art Therapy and participating in the Student Academic Conference on an art education related research project. This course is required for K-12 licensure for teachers of Art Education and is a part of the MSUM Service Learning initiative.

### ***[ART 404A] Ceramics Studio***

Individual contracts are employed to allow students to seek their own voice and direction in ceramics, preparing them to continue as active individually expressive artists after graduation. Work produced is frequently connected to the senior exhibition. Students may take Art 404A and 405A in any order.

### ***[ART 404C] Figure Drawing/Painting Studio***

This is an advanced study (combined painting and drawing media) from life model focusing on figure's anatomy, proportion, color, composition and the surrounding environment. The primary media will be traditional charcoal, watercolor and oil. The subjects of portraiture and figure drawing /painting in both historical and contemporary approaches will be discussed. During the semester, students will develop a portfolio of strong figurative work. May be repeated up to 8 credits.

### ***[ART 404D] Printmaking Studio***

Students may choose any combination of the printmaking processes (relief, intaglio, lithography, screen-printing, mono-printing), but are asked to specialize in one process for the final semester of 400 level studio. Color processes are emphasized. Personal expression is expected. Students may take Art 404D and 405D in any order.

### ***[ART 404E] Sculpture Studio***

Emphasis on professional development and individual student investigation of methods, materials, and concepts intended for the development of a personal visual vocabulary resulting in a cohesive body of work. Students must have completed Art 303E, 304E, and 305E prior to enrolling in this class. Students may take Art 404E and 405E in any order.

### ***[ART 404F] Photography Studio***

Further development of conceptual and formal qualities in selected non-silver process photographic projects, plus color photography and processing. The scope of the work and the media will be determined in contractual arrangement between the student and the instructor. Students are required to have completed Art 304F and 305F prior to enrolling in this class.

#### ***[ART 404H] Drawing Studio***

Further development of conceptual and formal qualities of drawing in media of particular interest to the student based on previous investigation and initial contractual agreement between student and instructor. Emphasis on the development of a cohesive body of work showing coordination of technical, formal and conceptual issues in the context of personal imagery. Students must have completed eight credits of Art 304H, 305H, or 303H prior to enrolling in this class. Students may take Art 404H and 405H in any order.

#### ***[ART 405A] Ceramics Studio***

A continuation of study begun in Art 404A. Individual contracts are employed to allow students to seek their own voice and direction in ceramics, preparing them to continue as active individually expressive artists after graduation. Work produced is frequently connected to the senior exhibition. Students may take Art 404A and 405A in any order.

#### ***[ART 405C] Painting Studio***

Further development of advanced studio work. Emphasis on production of cohesive body of work, portfolio preparation, professional presentation, and senior exhibition.

#### ***[ART 405D] Printmaking Studio***

A continuation of study begun in Art 404D. Students may choose any combination of the printmaking processes (relief, intaglio, lithography, screen-printing, mono-printing), but are asked to specialize in one process for the final semester of 400 level studio. Color processes are emphasized. Personal expression is expected. Students may take Art 404D and 405D in any order.

#### ***[ART 405E] Sculpture Studio***

A continuation of study begun in Art 404E. Emphasis on professional development and individual student investigation of methods, materials, and concepts intended for the development of a personal visual vocabulary resulting in a cohesive body of work. Students must have completed Art 304E, and 305E prior to enrolling in this class. Students may take Art 404E and 405E in any order.

#### ***[ART 405F] Photography Studio***

A continuation of study begun in Art 404F. Further development of conceptual and formal qualities in selected non-silver process photographic projects, plus color photography and processing. The scope of the work and the media will be determined in contractual arrangement between the student and the instructor. Students are required to have completed Art 304F and 305F prior to enrolling in this class.

#### ***[ART 405H] Advanced Studies in Drawing and Illustration***

Development of a cohesive body of drawings or illustrations in preparation for the required BFA exhibition or also for application to the Certificate in Studio Research. Students must have completed a minimum of 12 credits of 300 and 400 level Drawing and Illustration courses prior to enrolling. May be repeated for up to 8 credits.

***[ART 405L] Illustration Studio***

Continues study begun in 404L. Further development of conceptual and formal qualities of illustration in media selected appropriate to the subject. Emphasis will be placed on producing a conclusive, clear pictorial statement.

***[ART 408] Women and Art***

This course examines the history of women artists as well as the representation of women as subjects in art. The course also provides a historical introduction to feminist art history and methodology. Same as WS 408.

***[ART 411] Medieval Art***

History of the art and architecture of the Byzantine and Western Medieval cultures.

***[ART 420] Renaissance Art***

Renaissance and Mannerist art and architecture in Italy and Northern Europe.

***[ART 425] Art History Field Experience***

Art History Field Experience is a focused travel course introducing the visual arts and heritage of a given region or regions. Reading, writing, and oral presentation assignments are combined with on-site explorations of important art collections, cultural monuments as well as visits with professionals in art historical fields.

***[ART 430] Nineteenth Century Art***

History of Nineteenth-Century painting, sculpture, photography and architecture, including Neoclassicism, Romanticism, Realism, Impressionism, and Post-Impressionism.

***[ART 431] Twentieth Century Art***

History of Twentieth-Century avant-garde painting, sculpture, photography and architecture, from Art Nouveau to Pop Art.

***[ART 450] Contemporary Art, Design, and Theory***

This seminar course is designed as a capstone course for art majors. Emphasis will be placed on major art movements and theoretical concepts from 1945 to the present day. In addition to the listed prerequisites, students must complete one upper-level art history course prior to enrolling in this class.

***[ART 467] Art Therapy Related Field Experience***



This field experience is intended for students in Junior or Senior standing who have completed at least 50% of the required Art Therapy Minor credit requirements in both Psychology and Visual Art. Students will select a placement from a list of over 20 agencies and organizations in the Fargo-Moorhead Area that have established partnerships with MSUM. These organizations and agencies range from pre-school to elder ages and include: Health care facilities, mental health agencies, juvenile education centers, elder-care facilities, homeless shelters and programs for at risk-youth. The experience is conducted under the direct leadership of a supervisor who has conveyed the mission, training requirements and parameters of the organization as well as the very specific characteristics, personal perspectives and expressive intent of the clients. Students will spend 40 hours at their site and be responsible for goal setting, reflective writing and submitting a final report.

### ***[ART 469] Internship***

A one semester self-directed exploration or professional experience with an artist, designer, illustrator, art museum or studio. A maximum of 12 internship credits may be applied to the degree.

### ***[ART 470] Art & Archaeology of Ancient Egypt***

Exploration of the art and monuments of Egypt from the Neolithic Period to Late Antiquity.

### ***[ART 479] Art History Thesis***

Independent Study in art history for senior thesis. Required for art history emphasis. Students need a minimum of six credits.

### ***[ART 480] Professional Practices in Art***

Consideration of social, economic and legal concerns of the contemporary visual artist. Topics include: Art law, copyright law, portfolio development, exhibition preparation, and other issues pertinent to performance in the professional art world. This course is open to senior-level and BFA students.

### ***[ART 490] Topics in Art***

Studio, seminar or discussion of topics not included in other art courses. Up to four credits may be applied to the major. This is a topical course and may be repeated when the topic changes.

### ***[ART 494A] Mentored Research in Ceramics***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

### ***[ART 494C] Mentored Research in Painting***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

### ***[ART 494D] Mentored Research in Printmaking***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

***[ART 494E] Mentored Research in Sculpture***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

***[ART 494F] Mentored Research in Photography***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

***[ART 494H] Mentored Research in Drawing***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

***[ART 494L] Mentored Research in Illustration***

Guided research designed to increase the professionalism of the student's creative work in all aspects of artistic production. The course will culminate in the production of a creative portfolio of superior quality. Permission from instructor is required to enroll in this course.

***[ART 497] Independent Study in Art***

Studies selected from art history, theory of ceramics, drawing, graphic design, painting, photography, printmaking, sculpture, and watercolor. May be repeated for up to 12 credits.

***[ART 498] Exhibition***

This course will familiarize students with professional practices involved in the preparation of work for an exhibition, interactions with gallery/museum personnel, and the execution of an exhibition.

**Astronomy**

***[AST 102] Solar System Astronomy***

An introduction to the history of astronomy, the Sun, the origin of the solar system, and the study of the planets. Lab included. MnTC Goal 3.

***[AST 104] Stellar Astronomy***

An introduction to the history of astronomy, stars, stellar evolution, galaxies and the origin and structure of the universe. Lab included. MnTC Goal 3.

### ***[AST 190] Topics in Astronomy***

A study of a specific area of astronomy. This course may be repeated as course content may vary.

### ***[AST 324] Life and Death in the Universe***

The last century will be remembered in small part as a time when humans finally started scientifically addressing the most fundamental questions about the universe: "How did the Universe begin," "How did life on Earth begin and how might it end," and "Is there anyone out there?" Students will address these issues by reviewing our current scientific understanding of the Big Bang, the origins of life on Earth, the Evolution of Life, and the possible origins of intelligent life elsewhere. The class will be cross disciplinary with heavy emphasis on astronomy, planetary geology, biology and some history. In addition to in-lecture coursework, lab activities are used to provide students the opportunity to plan, design and execute their own investigations of these scientific concepts. MnTC Goal 3.

### ***[AST 360] Planetary Science***

A synthesis of current knowledge of the members of the solar system and the origin and evolution of planetary system. Lab included. MnTC Goal 3.

### ***[AST 361] Stellar Astrophysics***

The application of physics to observations of stars and interpreting their formation and evolution. The course reviews the theory of radiative transfer within stars, stellar atmospheres and the formation of the stellar spectra we can observe, stellar structure, and stellar evolution.

### ***[AST 362] Galactic and Extragalactic Astrophysics***

The application of physics to observations of our Milky Way galaxy and other galaxies and interpreting their formation and evolution. The course reviews the structure, composition, kinematics, and evolution of the Milky Way, other spiral galaxies, elliptical galaxies, and the large scale structure. We also review active galactic nuclei in light of galaxy evolution.

### ***[AST 365] Cosmology***

Theoretical principles and observational evidence regarding the large-scale structure and evolution of the universe.

### ***[AST 366] Observational Astronomy***

An introduction to the use of telescopes and CCD imaging techniques in astronomical research. Students are expected to take and reduce image data from the Feder Observatory for a research project as part of the course.

### ***[AST 390] Topics in Astrophysics***

Consideration of special problems or the study of introductory topics at a more advanced level. May be repeated for credit with consent of instructor for no more than three times or six credits.

### ***[AST 490] Topics in Astronomy***

This is an upper division topics course and may be repeated when the topic changes.

## **Athletic Training**

### ***[AT 120] Introduction to Athletic Training***

This course is designed to introduce the student to the profession of athletic training and the certified athletic trainer as a health care provider. Various aspects of MSU Moorhead's athletic training education program are discussed.

### ***[AT 210] Medical Terminology***

This on-line course is designed to introduce the student to medical terminology. Students will learn medical terminology so that they can effectively communicate with other members of the health care team. Students will develop a foundation in medical terminology to increase their medical vocabulary.

### ***[AT 220] Care and Prevention of Injuries & Illnesses***

This course will provide the student with the basic principles of prevention, recognition, immediate care, and treatment of common injuries and illnesses associated with physical activity. The student will also learn basic taping and wrapping techniques.

### ***[AT 220L] Care and Prevention of Injuries and Illnesses Lab***

Application and practical experience with the concepts of prevention, recognition, immediate care, and treatment of common injuries and illnesses associated with physical activity. The student will apply basic taping techniques. To be taken concurrently with AT 220.

### ***[AT 225] Athletic Training Emergency/Immediate Care***

Athletic Training Emergency/Immediate Care teaches the basics of emergency care focused on sports injuries. It is a comprehensive course for the athletic trainer who must initially evaluate and stabilize an athlete in a trauma situation. The course teaches rapid assessment, resuscitation, packaging and transportation of the injured athlete. Students will earn American Red Cross CPR/AED for the Professional Rescuer/Health Care Provider and EMR certifications with successful completion of the course to the American Red Cross standards.

### ***[AT 290] Topics in Athletic Training***

This is a topical course in Athletic Training and may be repeated when the topic varies.

### ***[AT 320] Athletic Training Techniques***

The athletic training student will learn advanced taping techniques, fabrication, fitting, and maintenance of special pads, splints, and braces. Admission to the Athletic Training major.

### ***[AT 321] Orthopedic Clinical Assessment: Upper Extremity***

This course is an in-depth study of orthopedic clinical assessment techniques involving the musculoskeletal and neurovascular structures of the upper extremities. Content includes the application of theoretical concepts with practical experience in assessment. To be taken concurrently with AT 321L.

***[AT 321L] Orthopedic Clinical Assessment: Upper Extremity Lab***

Application and practical experience of theoretical concepts in assessment of the upper extremities. To be taken in concurrently with AT 321.

***[AT 322] Orthopedic Clinical Assessment: Lower Extremity***

This course is an in-depth study of orthopedic clinical assessment techniques involving the musculoskeletal and neurovascular structures of the lower extremity. Content includes the application of theoretical concepts with practical experience in assessment. To be taken concurrently with AT 322L. Admission into the ATEP.

***[AT 322L] Orthopedic Clinical Assessment: Lower Extremity Lab***

Application and practical experience of theoretical concepts in assessment of the lower extremities. To be taken concurrently with AT 322.

***[AT 323] Therapeutic Modalities***

This course will investigate the injury response process, the physiology and psychology of pain, development and delivery of treatment protocol, thermal agents, electrical agents, ultrasound, and mechanical modalities. To be taken concurrently with AT 323L.

***[AT 323L] Therapeutic Modalities Lab***

The student will demonstrate the ability to apply therapeutic modalities. This includes determining inflammatory phase, indications, contraindications, and appropriate parameters for treatment of various contemporary therapeutic modalities. To be taken concurrently with AT 323.

***[AT 324] Therapeutic Exercise***

A study of therapeutic exercise and conditioning techniques. The basis of injury rehabilitation, the goals and tools of rehabilitation, and rehabilitation techniques for specific injuries will be studied. To be taken concurrently with AT 324L.

***[AT 324L] Therapeutic Exercise Lab***

The student will demonstrate and apply appropriate methods of therapeutic exercise and conditioning techniques. To be taken concurrently with AT 324.

***[AT 362] Athletic Training Practicum I***

Students enrolled in AT 362 will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include MSUM, local high schools, local junior high schools, sports medicine facilities, and other colleges and universities. This practicum will be taken concurrently with AT 320, AT 322 and AT 322L.

### ***[AT 363] Athletic Training Practicum II***

Students enrolled in AT 363 will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include MSUM, local high schools, local junior high schools, sports medicine facilities, and other colleges and universities. This practicum will be taken concurrently with AT 321, AT 321L, AT 323 and AT 323L.

### ***[AT 364] Athletic Training Practicum III***

Students enrolled in AT 364 will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include MSUM, local high schools, local junior high schools, sports medicine facilities, and other colleges and universities. This practicum will be taken concurrently with AT 324 and AT 324L.

### ***[AT 390] Topics in Athletic Training***

This is an upper division topics course and may be repeated when the topic changes.

### ***[AT 390L] Topics in Athletic Training Laboratory***

This is an upper division topical laboratory course, and will commonly be offered in conjunction with an AT 390 topical lecture course.

### ***[AT 397] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

### ***[AT 440] Pharmacology and Medical Issues***

In-depth study of general pharmacology, medical conditions, and disabilities of athletes and others involved in physical activity. The Athletic Training student will learn pharmacological applications, including awareness of the indications, contraindications, precautions, and interactions of medications and of the governing regulations relevant to the treatment of injuries and illnesses. The athletic training student will also learn referral management, and treatments of athletes and others involved in physical activity who suffer from general medical conditions and disabilities.

### ***[AT 460] Organization and Administration of Athletic Training***

This course is designed to prepare the athletic training students for the development and administration of various procedures, records, forms, budgets, and professional contracts needed to successfully manage an athletic training program.

### ***[AT 465] Athletic Training Practicum IV***

Students enrolled in AT 465 will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include MSUM, local high schools, local junior high

schools, sports medicine facilities, and other colleges and universities. This practicum will be taken concurrently with AT 420 and AT 440.

### ***[AT 466] Athletic Training Practicum V***

Students enrolled in AT 465 will receive supervised clinical education experience in a variety of clinical education settings. Clinical experience settings may include MSUM, local high schools, local junior high schools, sports medicine facilities, and other colleges and universities. This practicum will be taken concurrently with AT 460.

### ***[AT 469] Internship***

Designed to give athletic training students an opportunity to gain supervised clinical experience in a variety of athletic training settings. A maximum of 12 internship credits may be applied to the degree.

### ***[AT 490] Topics in Athletic Training***

This is an upper division topics course and may be repeated when the topic changes.

### ***[AT 492] Athletic Training Senior Seminar***

This seminar will cover a broad range of current issues and research in the athletic training profession. This is the final preparation for the student for the Board of Certification (BOC) examination. In addition, the mechanics of resume writing, interviewing, and job searching will be examined.

## **Athletics**

### ***[ATHL 181A] Varsity Basketball-Men***

Participation in Varsity Basketball during the Fall Semester.

### ***[ATHL 181B] Varsity Basketball-Men***

Participation in Varsity Basketball during the Spring Semester.

### ***[ATHL 181C] Varsity Cross-Country and Indoor Track and Field-Men***

Participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

### ***[ATHL 181D] Varsity Indoor and Outdoor Track and Field-Men***

Participation in Varsity Indoor and Outdoor Track during the Spring Semester.

### ***[ATHL 181E] Varsity Football***

Participation in Varsity Football during the Fall Semester.

### ***[ATHL 181F] Varsity Football***

Participation in Varsity Football during the Spring Semester.

***[ATHL 181G] Varsity Wrestling***

Participation in Varsity Wrestling during the Fall Semester.

***[ATHL 181H] Varsity Wrestling***

Participation in Varsity Wrestling during the Spring Semester.

***[ATHL 181I] Varsity Basketball-Women***

Participation in Varsity Basketball during the Fall Semester.

***[ATHL 181J] Varsity Basketball-Women***

Participation in Varsity Basketball during the Spring Semester.

***[ATHL 181K] Varsity Cross-Country and Indoor Track and Field-Women***

Participation in Varsity Cross-Country and/or Indoor Track & Field during the Fall Semester.

***[ATHL 181L] Varsity Indoor and Outdoor Track and Field-Women***

Participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 181M] Varsity Golf***

Participation in Varsity Golf during the Fall Semester.

***[ATHL 181N] Varsity Soccer***

Participation in Varsity Soccer during the Fall Semester.

***[ATHL 181O] Varsity Soccer***

Participation in Varsity Soccer during the Spring Semester.

***[ATHL 181P] Varsity Softball***

Participation in Varsity Softball during the Fall Semester.

***[ATHL 181Q] Varsity Softball***

Participation in Varsity Softball during the Spring Semester.

***[ATHL 181R] Varsity Swimming***

Participation in Varsity Swimming during the Fall Semester.

***[ATHL 181S] Varsity Swimming***



Participation in Varsity Swimming during the Spring Semester.

***[ATHL 181T] Varsity Tennis***

Participation in Varsity Tennis during the Spring Semester.

***[ATHL 181U] Varsity Volleyball***

Participation in Varsity Volleyball during the Fall Semester.

***[ATHL 181V] Varsity Volleyball***

Participation in Varsity Volleyball during the Spring Semester.

***[ATHL 181W] Varsity Cheer Team***

Participation in Varsity Cheer Team

***[ATHL 181X] Varsity Dance Team***

Participation in Varsity Dance Team.

***[ATHL 281A] Varsity Basketball-Men***

Second year participation in Varsity Basketball during the Fall Semester.

***[ATHL 281B] Varsity Basketball-Men***

Second year participation in Varsity Basketball during the Spring Semester.

***[ATHL 281C] Varsity Cross-Country and Indoor Track and Field-Men***

Second year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 281D] Varsity Indoor and Outdoor Track and Field-Men***

Second year participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 281E] Varsity Football***

Second year participation in Varsity Football during the Fall Semester.

***[ATHL 281F] Varsity Football***

Second year participation in Varsity Football during the Spring Semester.

***[ATHL 281G] Varsity Wrestling***

Second year participation in Varsity Wrestling during the Fall Semester.

***[ATHL 281H] Varsity Wrestling***

Second year participation in Varsity Wrestling during the Spring Semester.

***[ATHL 281I] Varsity Basketball-Women***

Second year participation in Varsity Basketball during the Fall Semester.

***[ATHL 281J] Varsity Basketball-Women***

Second year participation in Varsity Basketball during the Spring Semester.

***[ATHL 281K] Varsity Cross-Country and Indoor Track and Field-Women***

Second year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 281L] Varsity Indoor and Outdoor Track and Field-Women***

Second year participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 281M] Varsity Golf***

Second year participation in Varsity Golf during the Fall Semester.

***[ATHL 281N] Varsity Soccer***

Second year participation in Varsity Soccer during the Fall Semester.

***[ATHL 281O] Varsity Soccer***

Second year participation in Varsity Soccer during the Spring Semester.

***[ATHL 281P] Varsity Softball***

Second year participation in Varsity Softball during the Fall Semester.

***[ATHL 281Q] Varsity Softball***

Second year participation in Varsity Softball during the Spring Semester.

***[ATHL 281R] Varsity Swimming***

Second year participation in Varsity Swimming during the Fall Semester.

***[ATHL 281S] Varsity Swimming***

Second year participation in Varsity Swimming during the Spring Semester.

***[ATHL 281T] Varsity Tennis***

Second year participation in Varsity Tennis during the Spring Semester.

***[ATHL 281U] Varsity Volleyball***

Second year participation in Varsity Volleyball during the Fall Semester.

***[ATHL 281V] Varsity Volleyball***

Second year participation in Varsity Volleyball during the Spring Semester.

***[ATHL 281W] Varsity Cheer Team***

Participation in Varsity Cheer Team

***[ATHL 281X] Varsity Dance Team***

Participation in Varsity Dance Team.

***[ATHL 381A] Varsity Basketball-Men***

Third year participation in Varsity Basketball during the Fall Semester.

***[ATHL 381B] Varsity Basketball-Men***

Third year participation in Varsity Basketball during the Spring Semester.

***[ATHL 381C] Varsity Cross-Country and Indoor Track and Field-Men***

Third year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 381D] Varsity Indoor and Outdoor Track and Field-Men***

Third year participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 381E] Varsity Football***

Third year participation in Varsity Football during the Fall Semester.

***[ATHL 381F] Varsity Football***

Third year participation in Varsity Football during the Spring Semester.

***[ATHL 381G] Varsity Wrestling***

Third year participation in Varsity Wrestling during the Fall Semester.

***[ATHL 381H] Varsity Wrestling***

Third year participation in Varsity Wrestling during the Spring Semester.

***[ATHL 381I] Varsity Basketball-Women***

Third year participation in Varsity Basketball during the Fall Semester.

***[ATHL 381J] Varsity Basketball-Women***

Third year participation in Varsity Basketball during the Spring Semester.

***[ATHL 381K] Varsity Cross-Country and Indoor Track and Field-Women***

Third year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 381L] Varsity Indoor and Outdoor Track and Field-Women***

Third year participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 381M] Varsity Golf***

Third year participation in Varsity Golf during the Fall Semester.

***[ATHL 381N] Varsity Soccer***

Third year participation in Varsity Soccer during the Fall Semester.

***[ATHL 381O] Varsity Soccer***

Third year of participation in Varsity Soccer during the Spring Semester.

***[ATHL 381P] Varsity Softball***

Third year participation in Varsity Softball during the Fall Semester.

***[ATHL 381Q] Varsity Softball***

Third year participation in Varsity Softball during the Spring Semester.

***[ATHL 381R] Varsity Swimming***

Third year participation in Varsity Swimming during the Fall Semester.

***[ATHL 381S] Varsity Swimming***

Third year participation in Varsity Swimming during the Spring Semester.

***[ATHL 381T] Varsity Tennis***

Third year participation in Varsity Tennis during the Spring Semester.

***[ATHL 381U] Varsity Volleyball***

Third year participation in Varsity Volleyball during the Fall Semester.

***[ATHL 381V] Varsity Volleyball***

Third year of participation in Varsity Volleyball during the Spring Semester.

***[ATHL 381W] Varsity Cheer Team***

Participation in Varsity Cheer Team

***[ATHL 381X] Varsity Dance Team***

Participation in Varsity Dance Team.

***[ATHL 397] Independent Study in Athletics***

Independent Study in Athletics

***[ATHL 481A] Varsity Basketball-Men***

Fourth year participation in Varsity Basketball during the Fall Semester.

***[ATHL 481B] Varsity Basketball-Men***

Fourth year participation in Varsity Basketball during the Spring Semester.

***[ATHL 481C] Varsity Cross-Country and Indoor Track and Field-Men***

Fourth year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 481D] Varsity Indoor and Outdoor Track and Field-Men***

Fourth year participation in Varsity Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 481E] Varsity Football***

Fourth year participation in Varsity Football during the Fall Semester.

***[ATHL 481F] Varsity Football***

Fourth year participation in Varsity Football during the Spring Semester.

***[ATHL 481G] Varsity Wrestling***

Fourth year participation in Varsity Wrestling during the Fall Semester.

***[ATHL 481H] Varsity Wrestling***

Fourth year participation in Varsity Wrestling during the Spring Semester.

***[ATHL 481I] Varsity Basketball-Women***

Fourth year participation in Varsity Basketball during the Fall Semester.

***[ATHL 481J] Varsity Basketball-Women***

Fourth year participation in Varsity Basketball during the Spring Semester.

***[ATHL 481K] Varsity Cross-Country and Indoor Track and Field-Women***

Fourth year participation in Varsity Cross-Country and/or Indoor Track and Field during the Fall Semester.

***[ATHL 481L] Varsity Indoor and Outdoor Track and Field-Women***

Fourth year participation in Indoor and Outdoor Track and Field during the Spring Semester.

***[ATHL 481M] Varsity Golf***

Fourth year participation in Varsity Golf during the Fall Semester.

***[ATHL 481N] Varsity Soccer***

Fourth year participation in Varsity Soccer during the Fall Semester.

***[ATHL 481O] Varsity Soccer***

Fourth year participation in Varsity Soccer during the Spring Semester.

***[ATHL 481P] Varsity Softball***

Fourth year participation in Varsity Softball during the Fall Semester.

***[ATHL 481Q] Varsity Softball***

Fourth year participation in Varsity Softball during the Spring Semester.

***[ATHL 481R] Varsity Swimming***

Fourth year participation in Varsity Swimming during the Fall Semester.

***[ATHL 481S] Varsity Swimming***

Fourth year participation in Varsity Swimming during the Spring Semester.

***[ATHL 481T] Varsity Tennis***

Fourth year participation in Varsity Tennis during the Spring Semester.

***[ATHL 481U] Varsity Volleyball***

Fourth year participation in Varsity Volleyball during the Fall Semester.

***[ATHL 481V] Varsity Volleyball***

Fourth year of participation in Varsity Volleyball during the Spring Semester.

***[ATHL 481W] Varsity Cheer Team***

Participation in Varsity Cheer Team

***[ATHL 481X] Varsity Dance Team***

Participation in Varsity Dance Team.

**Biochemistry and Biotechnology**

***[BCBT 100] The Science of Cooking***

This course will look at cooking from a scientific perspective to understand the food we eat and enjoy. Cooking may be the oldest and most widespread application of science. Students will use principles of biochemistry with some chemistry and biology to analyze food and investigate how cooking works. Students will also do several edible experiments and look at the science behind how it all works. Each week a different food will be explored. Topics include, but are not limited to, what makes a good experiment, death by chocolate, cheese making, the joys of hot sauce and salsa food biochemistry, the science of spice, and what is taste? This course includes a lab component. Students are expected to conduct three food experiments independent of class time. Learn to be a better cook by understanding food at the molecular level. MnTC Goal 3.

***[BCBT 120] Introduction to Biochemistry & Biotechnology Careers***

Introduction to biochemistry and biotechnology careers. Topics may include: current and future career options & trends; training and background needed for these careers; scope of industry; job types at different levels of training. Primer to BCBT graduate, professional, and industry careers.

***[BCBT 190] Topics in Biochemistry & Biotechnology***

Exploration of a specific biochemistry/biotechnology topic. This course may be repeated as topic varies.

***[BCBT 200] Introduction to the Biochemistry and Biotechnology Industry***

This course is an introduction to the biochemistry and biotechnology industry including an overview of the different industry sectors. Topics covered include the scientific advances and economic impact of the biochemistry and biotechnology industry as well as the training requirements for entering the industry's workforce. Prerequisite: One semester of Biosciences or Chemistry with lab.

***[BCBT 220] Survey of BCBT Research and Methodology***

Introduction to research approaches in areas of biochemistry and biotechnology research. Seminar topics include: application of the scientific method in BCBT research fields; breadth and depth of background/training to be successful in research; reading scientific literature; introduction to ethics in

research. Seminars will relate to current research by MSUM affiliated faculty that students may work with later in their program.

***[BCBT 290] Topics in Biochemistry & Biotechnology***

Exploration of a specific Biochemistry / Biotechnology topic. This course may be repeated as topic varies.

***[BCBT 360] Team-Based BCBT Research***

Students will participate in a team-based research experience in a principle investigator system in which they will apply advanced research techniques to a current research problem. In addition to research skills, as part of a research team the students will learn research management, team coordination, and conflict resolution skills.

***[BCBT 390] Topics in Biochemistry & Biotechnology***

Exploration of a specific biochemistry/biotechnology topic. This course may be repeated as topic varies.

***[BCBT 397] Biochemistry & Biotechnology Research***

Faculty-mentored independent research in Biochemistry and Biotechnology. Course may be repeated for credit.

***[BCBT 400] Biochemistry I***

A survey of the chemistry and metabolism of living systems. Topics include buffers and biological buffering, structure, function and chemistry of proteins, carbohydrates, lipids, nucleic acids and enzymes, and introduction to metabolism and metabolic pathways.

***[BCBT 405] Biochemistry Laboratory I***

Representative experiments in the quantitation, isolation and metabolism of naturally occurring substances. Techniques include: assay development, column chromatography, protein and nucleic acid isolation and analysis, protein electrophoresis, and enzymology.

***[BCBT 410] Vaccinology Senior Seminar***

This course will cover the vaccine types, delivery, efficacy, and safety. Students will learn about the mechanism of action of different vaccines; traditional versus modern vaccine production methods, the process of clinical trials and approval for new vaccines; and discuss ethical concerns related to vaccine use. The course is required for the Vaccinology Minor.

***[BCBT 450] Molecular and Biophysical Chemistry***

Biophysical study of molecular structures, biophysical techniques, and biological mechanisms. Includes the biological functions of cells, tissues and organisms in terms of the structure and behavior of biological molecules and techniques.

***[BCBT 460] BCBT Literature Review and Presentation***



Advanced analysis and critique of primary publications in biochemistry and biotechnology in a journal club format. Topical discussions and written reviews will facilitate a deeper understanding of advanced research methods and the publication process.

#### ***[BCBT 461] Biotechniques: Nucleic Acids & Bioinformatics***

Advanced theory and practice of techniques for working with DNA and RNA for research and applications. Development of modern bioinformatics skills and applications to genomic research.

#### ***[BCBT 462] Cell Culture and Immunochemistry***

An introduction to animal cell culture and immunochemical staining techniques. Students will learn the basic theory of cell culture and the use of antibodies and epitope tagged proteins to evaluate cellular functions. Students will work with mammalian cell cultures, transfect cells, insert epitope tagged proteins as functional markers in cells, apply antibody staining techniques, culture and learn techniques involved in maintaining and manipulating cell cultures.

#### ***[BCBT 463] Proteomics and Advanced Chromatography***

An introduction to proteomics, mass spectrometry, and advanced chromatography systems. Students will learn the theory and development of proteomics as a key component of systems biology and explore how proteomic techniques can be applied to gain insight into a wide variety of biochemical and biotechnological research problems. Advanced techniques include 2D electrophoresis, liquid chromatography, quantitative and tandem mass spectrometry, and protein bioinformatics. This is a lab/lecture course where students will study background and theory and practice some of these techniques in the lab.

#### ***[BCBT 469] Internship***

This course is the required capstone experience for the Biochemistry and Biotechnology Certificate Program. An internship or work experience is required to complete the Biochemistry and Biotechnology Certificate. The experience can be a paid or volunteer experience. The experience needs to be approved by a faculty advisor in the Biochemistry and Biotechnology Certificate Program. Following the internship or work experience the student will be required to write a paper pertaining to the experience. Student must be in junior standing in a bioscience or chemistry major.

#### ***[BCBT 475] Biotechniques: Research and Communication I***

This course consists of both laboratory research and significant training on scientific communication. Students will work in teams to identify a faculty research mentor, prepare and present formal research proposals, design research experiments and begin a research project that will last the year. Students must have senior standing in the biotechnology emphasis, which requires the completion of each of the biotechnology core courses with a grade of C or above.

#### ***[BCBT 476] Biotechniques: Research and Communication II***

This course consists of both laboratory research and significant training on scientific communication and is the second in a sequence for seniors in the biochemistry and biotechnology major. Students will continue to work on their research projects that were initiated in Biotechniques: Research and Communication I. Students will

make oral presentations critically evaluating scientific literature, and finally prepare a poster to present the data from their research project.

***[BCBT 477] Biotechniques: Proteomics and Advanced Protein Expression***

Introduction to proteomics and recombinant protein expression. Students will study advanced techniques involved in proteomics. Students will also study and work with expression of recombinant fusion proteins in bacteria or mammalian cultured cells. Includes advanced chromatography and use of automated chromatography systems including FPLC and HPLC.

***[BCBT 478] Biotechniques: Plant and Mammalian Tissue Culture***

Introduction to plant and animal cell tissue culture techniques. Students will learn the basic theory of plant and cell tissue culture. Students will also work with both plant and mammalian cell cultures, transfect cell cultures and learn techniques involved in maintaining and manipulating cell cultures.

***[BCBT 479] Biotechniques: Advanced DNA & RNA Methodology***

Theory and practice in advanced DNA and RNA techniques with emphasis on isolation of RNA from cells and tissues and its subsequent use in diagnostic and analytical applications.

***[BCBT 482] Biotechniques: Biofuels***

An introduction to the biological concept of the growing field of Biofuels. In this section block students will learn the complex carbohydrates which make up the dynamic structure of the plant primary cell wall. They will also learn how to extract these carbohydrate moieties, conduct analytical and structural analyses, and also determine the potential energy incumbent within such carbohydrates.

***[BCBT 490] Topics in Biochemistry & Biotechnology***

This course will cover a variety of topics or laboratory techniques that may include advanced recombinant DNA and RNA, a short course on cell culturing, surgical techniques, advanced microscopy or other Biochemistry & Biotechniques related subjects. This course will be a combination of two or more topics depending on demand.

***[BCBT 497] Senior Research Thesis***

Research studies in all areas of biochemistry and biotechnology. A comprehensive research report is required. BCBT 497 should be taken only once.

## **Biology**

***[BIOL 100] Issues in Human Biology***

Human biology is a wide field that includes human physiology, genetics, medical studies and how humans impact the environment. We are bombarded with information about everything from green tea to intelligent design. Our students will be the scientific resources for their families and peer groups; they need to know how to wade through non-science to get to the facts. This course uses data and "news" to teach students how to properly sift through all this material and logically draw conclusions based on fact. MnTC Goal 2.

### ***[BIOL 104] Human Biology***

Biological basis of human structures and functions with references to genetics, development, nutrition and disease. For non-science majors. MnTC Goal 3.

### ***[BIOL 109] Biology Today***

This course offers an issues-oriented approach to the learning of biology. This course is designed to encourage critical evaluation of biological information providing students with a biological literacy that will enable them to make appropriate decisions affecting their own lives and the well-being of society. Course should be taken concurrently with Biol 109. For non-science majors; majors or minors in Biology should take Biol 111. MnTC Goal 3.

### ***[BIOL 109L] Biology Today Lab***

Twelve hours of laboratory experience will provide an understanding of the scientific method, the relationship between hypotheses and theories, data collection, analysis, and communication of results. Course should be taken concurrently with Biol 109. MnTC Goal 3.

### ***[BIOL 111] Cell Biology***

Fundamental concepts of the structure, function and reproduction of cells. Lab included.

### ***[BIOL 111L] Cell Biology Lab***

Lab that accompanies Biol 111

### ***[BIOL 115] Organismal Biology***

This course is designed for biology majors. The course will address biological diversity, primarily in plants and animals. Organismal diversity will be presented within an evolutionary context. Relationships between form and function as well as relationships of organisms to their environments will be addressed. Lab included.

### ***[BIOL 115L] Organismal Biology Laboratory***

Lab that accompanies Biol 115.

### ***[BIOL 190] Topics in Biology***

This is a topical course and may be repeated when the topic changes.

### ***[BIOL 236] Introduction to Microbiology***

Focuses on bacteria, viruses and other microbes and their influence on humans, especially on activities related to human health. Addresses the nature of scientific inquiry, along with key microbiology concepts. Lab is required. Basic laboratory skills include bacterial cultivation, aseptic technique, microscopy, bacterial quantitation. Not intended for students majoring in the biological sciences. MnTC Goal 3.

### ***[BIOL 236L] Intro Microbiology Lab***

Lab for Introduction to Microbiology. MnTC Goal 3.

***[BIOL 248] Introduction to Public Health***

This course will introduce students to the broad and multidisciplinary field of public health. Students from any major, will be introduced to the current, local and global issues in public health, and will be provided necessary background to understand the importance of scientific evidence and collaborative approach towards addressing these issues. MnTC Goal 8.

***[BIOL 275] Quantitative Biology***

The application of mathematics and statistics to biology. With lab that will emphasize computer applications. Two 1.15-hour lectures and one 3-hour lab each week.

***[BIOL 290] Topics in Biology***

This is a topical course and may be repeated when the topic changes.

***[BIOL 300] Biology of Women***

A study of the gender-related aspects of the biology and behavior of women, including a critical examination of research in this field. Appropriate as an elective only for Biology majors who choose the Health and Medical Science emphasis or the Life Science Emphasis. Lab included. MnTC Goal 3.

***[BIOL 305] General Botany***

This course is designed for the biology major and is a comprehensive introduction to the plant kingdom including the following topics: life-history, reproduction, structure, and physiology. A laboratory is included and involves self-paced microscopic and macroscopic analysis of living and preserved specimens.

***[BIOL 305L] General Botany Lab***

Lab that accompanies Biol 305

***[BIOL 308] Pacific Northwest Ecology***

This three credit summer travel course allows students to study general ecological principles and regional natural history within the context of a variety of ecosystems in the Pacific Northwest, including coastal, alpine, freshwater stream, lake, and river, and temperate rainforest systems. The ecological consequences and the science behind specific environmental and conservation issues are explored. The concept of local and global sustainability is a pervasive theme throughout the course. Prerequisite: One college-level science course. MnTC Goal 10.

***[BIOL 310] Science of Brewing***

This course will cover scientific and historical background into the scientific processes involved in brewing and fermentation science. Key scientific techniques and best practices will be covered in both lecture and lab. MnTC Goal 3.

### ***[BIOL 311] Neurobiology***

This course is a survey of the biological principles that underlie the function of the nervous system. Lab is required.

### ***[BIOL 321] Invertebrate Zoology***

This course is a survey of major invertebrate taxa, with some emphasis on insects. Course content includes identification of major groups and their ecology. Some emphasis will be placed on important parasites and agricultural pests. Each student will be responsible for creating a labeled collection of invertebrates.

### ***[BIOL 321L] Invertebrate Zoology Lab***

Lab that accompanies Biol 321

### ***[BIOL 322] Vertebrate Zoology***

This course is a survey of major vertebrate taxa, with emphasis on the evolutionary relationships among these groups and the interaction between anatomical structure and ecology.

### ***[BIOL 322L] Vertebrate Zoology Lab***

Lab that accompanies Biol 322.

### ***[BIOL 323] Human Anatomy***

Anatomical structure of the human body, from individual organ systems to the integrated whole. Includes cadaver dissection.

### ***[BIOL 323L] Human Anatomy Lab***

Lab that accompanies Biol 323

### ***[BIOL 326] Minnesota Plant Identification***

Identification of plants in Minnesota, including trees, shrubs, forbs, grasses, sedges, and ferns. Sight identification, keying skills, and proper nomenclature will be emphasized. Will include lecture and lab with much independent study in lab.

### ***[BIOL 326L] Minnesota Plant Identification Lab***

Lab that accompanies Biol 326

### ***[BIOL 328] Lake Superior Ecology***

This 3 credit summer travel course along the north shore of Lake Superior allows students to relate events of the creation and succession of natural resources; human use and exploitation of these resources; and attempts to preserve them. Lectures includes the ecology of the boreal forest and the effects of logging; fish

diversity and the rise and fall of the fisheries industry, including the calamity of sea lamprey invasion (and other exotic species); the rise and fall of the iron ore industry and its effect on the environment. Students will study the predator/prey interaction of the moose-wolf population of Isle Royale. The travel portion of the course includes tent camping in state parks to study the driving forces behind park development, including the history of people involved in conservation. As we travel north and across the US/Canadian border, we will visit industries including fisheries, forestry, iron ore mines, taconite mines, amethyst mines and tourism industry, observing their effects on both the environment and people. The concept of local and global sustainability will be a pervasive theme throughout the course.

### ***[BIOL 335] Tropical Conservation Biology***

There are two lectures per week during the spring semester to discuss definitions of biodiversity, and general principles of biological conservation. We discuss why diversity is so high in tropical regions, the value of biodiversity in terms of ecological services and economic potential. We then consider Costa Rica as a case study where these principles have been implemented so successfully. The "lab" component of this course is a mandatory, 10-day class trip to Costa Rica over spring break. In Costa Rica, students and faculty spend 2 days in a dry forest research station at Santa Rosa National Park to study the role of research in bioconservation, 4 days at an ecolodge in a humid forest in the "absolute" reserve at Cabo Blanco on the Pacific Ocean to study the impact of excluding people for more than 50 years, and another 4 days in cloud forest near Monteverde Reserve to study ecotourism as an effective but imperfect tool for conservation. A special fee is required to cover the costs of travel, food, and accommodations. MnTC Goal 10.

### ***[BIOL 341] Genetics***

A survey of the modern molecular and classical Mendelian principles underlying biological inheritance. With lab.

### ***[BIOL 341L] Genetics Lab***

Lab that accompanies Biol 341

### ***[BIOL 345] Principles of Ecology***

The structure and function of ecological systems. With lab and field work that will emphasize local species and ecosystems.

### ***[BIOL 345L] Ecology Lab***

Lab that accompanies Biol 345

### ***[BIOL 346] An Ecological Perspective***

This course seeks to help students understand basic ecological principles, and to use these principles to understand our current environmental problems. An integration of scientific, economic, political and ethical considerations will help students to appreciate the policies and practices necessary to achieving a sustainable future. MnTC Goal 10.

### ***[BIOL 347] Plant Physiology***

Structure and function of higher plants with emphasis on molecular and cellular physiology as related to whole plant functions. Topics include growth and development, photosynthesis, and environmental aspects of plant physiology.

***[BIOL 347L] Plant Physiology Lab***

Lab that accompanies Biol 347

***[BIOL 348] Evolutionary Biology***

Concepts, principles and evidence of evolutionary processes in biological systems.

***[BIOL 349] Human Physiology***

The study of human physiology from cellular homeostasis through organ systems. Includes the study of normal function, regulation, and integration of organ systems, and the implications of abnormal function.

***[BIOL 349L] Human Physiology Lab***

Lab that accompanies Biol 349

***[BIOL 350] Microbiology***

Covers concepts of basic and applied microbiology, emphasizing bacteriology and introducing virology and immunology. Laboratory covers basic microbiological techniques, identification of unknowns as well as a group research project. With lab.

***[BIOL 350L] Microbiology Lab***

Lab that accompanies Biol 350

***[BIOL 360] Cellular and Molecular Physiology***

This course involves the biological, biochemical, and molecular study of homeostasis at the cellular level. Key concepts include protein function, membrane function, signal transduction, electrical conduction, and cellular and intracellular movements.

***[BIOL 360L] Cellular and Molecular Physiology Lab***

Lab component of Cellular and Molecular Physiology.

***[BIOL 365] Developmental Biology***

A study of the mechanisms of development in a variety of biological systems, with analyses of changes from conception through aging. With lab.

***[BIOL 365L] Developmental Biology Lab***

Lab to accompany Biol 365 sections.

### ***[BIOL 370] Exploring Biology***

This course includes principles of biology with an emphasis on human biology, basic concepts in ecology, and the impact of specific environmental problems. The course includes two lab hours integrated into the bi-weekly meeting times. MnTC Goal 10.

### ***[BIOL 372] Aquatic Biology***

A general overview of aquatic ecosystems. This course includes basic physical and chemical properties of water (limnology), evolution and ecology of fishes (ichthyology), and resource conservation and management. With lab.

### ***[BIOL 385] Molecular Biology***

Molecular biology of the gene with emphasis on gene structure and expression in eukaryotes. Topics include current techniques used to study genomes, genes and regulation of gene expression.

### ***[BIOL 385L] Molecular Biology Lab***

This course is required for students in the Biology/Chemistry double major with an emphasis in Biochemistry and Biotechnology. The course may be used as an elective by students in other biology programs.

### ***[BIOL 390] Topics in Biology***

This is a topical course and may be repeated when the topic changes.

### ***[BIOL 400] Biochemistry I***

A survey of the chemistry and metabolism of living systems. Topics include buffers and biological buffering, structure, function and chemistry of proteins, carbohydrates, lipids, nucleic acids and enzymes, and introduction to metabolism and metabolic pathways.

### ***[BIOL 402] Principles of Animal Behavior***

The genetic, ecological, evolutionary and physiological aspects of animal behavior including the historical background, kin selection, communication, aggression, navigation, and reproductive behavior. With lab.

### ***[BIOL 405] Biochemistry Laboratory I***

Representative experiments in the quantitation, isolation and metabolism of naturally occurring substances. Techniques include: assay development, column chromatography, protein and nucleic acid isolation and analysis, protein electrophoresis, and enzymology.

### ***[BIOL 406] DNA as Destiny: Genetics and Society***

This course examines the various ethical, legal and social implications (ELSI) of genetic research and the applications of current and future applications of new genetic technologies. It is designed to provide students



in any major, with the necessary background to make informed decisions about these issues in a socially and civically responsible manner. MnTC Goal 9.

***[BIOL 410] Biochemistry II***

A survey of the chemistry and metabolism of living systems and nucleic acids biochemistry. Topics include study of catabolic and biosynthetic biochemical pathways and their regulation, chemical messengers and signal transduction, integration of metabolic pathways and nucleic acids biochemistry and other advanced biochemistry topics.

***[BIOL 430] Immunobiology***

Covers the components and functioning of the immune system: emphasizes the immune system at the organismal level as well as the cellular and molecular levels. Listed prerequisites may be waived by consent of instructor.

***[BIOL 438] Medical Microbiology***

A survey of the major bacterial and viral infectious disease agents and their associated diseases in humans.

***[BIOL 440] Middle School/Secondary Science Teaching Methods***

Materials and methods appropriate for middle/junior and senior high school science classes and laboratories. Same as CHEM 440 and PHYS 440.

***[BIOL 455] Wildlife Ecology***

The application of ecological principles to the management of wildlife populations. Population dynamics and field techniques are stressed. With lab and field work.

***[BIOL 460] Medical Laboratory Clinical Education***

Clinical education in a school/program of medical laboratory science in an affiliated hospital. Year-long sequence requires registration for 6 summer credits, 12 fall credits and 12 spring credits for a total of 30 Biol 460 credits. Consent of instructor and acceptance into an affiliated Medical Science Laboratory Science School/Program.

***[BIOL 469] Internship***

A supervised work experience generally involving research in a governmental agency or the private sector. A maximum of 12 internship credits may be applied to the degree.

***[BIOL 470] Undergraduate Laboratory Teaching***

Students will serve as undergraduate laboratory teaching assistants in selected biology classes under the supervision of a faculty mentor. May be repeated for credit.

***[BIOL 478] Research Design***

Students will identify a problem, complete a literature review of that topic, and design an experiment in any area of the biological sciences. This will include developing a question, conducting a literature search using current databases and techniques, develop an appropriate bibliography, examine ethical issues in research, understand plagiarism, and learn how to effectively communicate their research design through writing and presenting a research proposal.

***[BIOL 490] Topics in Biology***

This is a topical course and may be repeated when the topic changes.

***[BIOL 497] Undergraduate Research in Biology***

Individual research; project and its format must be accepted by the research advisor prior to registration. May be repeated for credit.

**Business**

***[BUS 101] Introduction to Business***

This course is designed to introduce students to the academic disciplines offered in the School of Business by requiring short essays, utilizing research, and providing guest speakers in accounting, finance, marketing, management, and international business. Speakers will provide advice on how students can get the most out of their college years and what the business world expects of new hires. Students will also learn how to develop a degree plan that will help track their progression through their years at MSUM.

***[BUS 145] Introduction to International Business***

The purpose of this course is to provide an introduction to the area of international business. The aim is to sensitize students to the complexities of managing an organization in the changing international environment. The instructor will focus on the diversity of international cultures and economies. Additionally, the course will focus on the unique international dimensions of organizational concerns such as leading, organizational culture, planning, and staffing in the international business environment.

***[BUS 245] Seminar on Doing Business in China***

This course will provide the conceptual framework for doing business in China. The course provides an overview of doing business in China, including an introduction to the Chinese economy, history and culture. China's economic growth phenomenon over the past three decades and the uniqueness of the Chinese market, organizations, and social structure will be examined in terms of the challenges and opportunities they bring to a foreign firm doing business in China.

***[BUS 345] China Business Trip***

Students in this class will travel to China for a first-hand experience of Chinese culture, business environment, financial system and the challenges and opportunities each of these bring to conducting foreign business in mainland China.

***[BUS 390] Topics in Business Administration***

This is a junior level topics course and may be repeated as topic varies.

### ***[BUS 401] Executive Mentorship***

I. Students will be assigned an executive mentor based on their completion of a personal profile. Students will meet with their mentor for 2-4 hours per month to explore their own career choices in light of the mentor's experiences and insights. Students are responsible for contacting their mentor. II. Students are expected to attend and contribute to brown bag lunches and social gatherings where both mentors and students are present. Students will have the opportunity and responsibility to represent themselves and MSUM professionally and courteously. III. Students will attend scheduled class sessions, participating actively in conversation, completing homework, and sharing insight and feedback from their interactions with their mentors. IV. Students will prepare a minimum of three 10-point reflection papers and a final 30-point summary paper based on their course/mentorship experiences. This course may be taken up to two times.

### ***[BUS 469] Internship***

Internship in Business

### ***[BUS 480] Dragon Consulting***

Students will work on project teams to apply their academic knowledge to real life business problems in real time. Through the Center for Innovative Business Solutions (CIBS) students will provide consulting services for clients and real-world experience for themselves. Businesses that have identified a project and work with student teams to find solutions and recommendations the business can implement. Students will have the opportunity and responsibility to represent themselves and MSUM professionally and courteously. Students will attend scheduled class sessions students to think critically about business issues and to be creative problem solvers as they navigate challenging projects.

### ***[BUS 490] Topics in Business Administration***

This is a senior level topics course and may be repeated as topic varies.

### ***[BUS 497] Independent Study in Business***

Independent reading or research allowing an individual student to explore a specific business topic under faculty supervision.

## **Chemistry**

### ***[CHEM 102] Environmental Chemistry***

A study of the fundamental applications of chemistry to environmental problems in the context of the social, political, economic, and ethical issues surrounding those problems. Students will formulate and test hypotheses by performing experiments and simulations in class and at home. They will communicate their findings and interpretations both orally and in writing. Suitable for those who have had no high school chemistry. Credit not applicable to a chemistry major or minor. MnTC Goal 3.

### ***[CHEM 105] Crime Scene Science***

Students will study basic chemical and science principles in the context of crime scene investigations. Laboratory investigations will accompany the content, which will provide an understanding of the scientific

method, the relationship between hypotheses and theories, data collection and analysis. Students will work on a final investigation and present their findings during the scheduled final exam time. Credit not applicable to a chemistry major or minor. MnTC Goal 3.

### ***[CHEM 110] Fundamentals of Chemistry***

Students will study fundamentals of chemistry with laboratory applications. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts and demonstrate basic laboratory skills necessary for success in college-level science courses. MnTC Goal 3.

### ***[CHEM 110L] Fundamentals of Chemistry Lab***

Lab component of Chem 110 Fundamentals of Chemistry.

### ***[CHEM 150] General Chemistry I***

General chemistry principles: atomic structure, stoichiometry, solutions, bonding, periodic properties of the elements, thermochemistry, and properties of solids, liquids and gases. Should register for Chem 150L (lab) to be taken concurrently. Must have completed an acceptable placement score, a minimum ACT mathematics score, or successful completion of math equivalent to or higher than Math 099, intermediate algebra, in the algebra sequence.

### ***[CHEM 150L] General Chemistry Laboratory I***

Laboratory techniques of general chemistry including qualitative and quantitative analysis. Course should be taken concurrently with Chem 150. Safety exam must be passed to remain in Chem 150L or subsequent lab courses.

### ***[CHEM 180] Introduction to Organic and Biochemistry***

Introduction to organic chemistry and structure and metabolism of carbohydrates, lipids, proteins, and nucleic acids. Concurrent registration with Chem 185. Credit not applicable to a chemistry major or minor.

### ***[CHEM 185] Introduction to Organic and Biochemistry Lab***

To be taken concurrently with Chem 180. Experiments exploring properties of selected functional groups, enzymes as diagnostic reagents and isolation and properties of carbohydrates, lipids, proteins and nucleic acids. Credit not applicable to a chemistry major or minor.

### ***[CHEM 190] Topics in Chemistry***

This is a topical course and may be repeated when the topic changes.

### ***[CHEM 210] General Chemistry II***

General chemistry principles: kinetics, chemical equilibrium, acid-base chemistry, solubility equilibrium, thermodynamics, oxidation-reduction, electrochemistry, coordination chemistry, and nuclear chemistry.

Should register for Chem 210L to be taken concurrently. Chem 210 and 210L are both required to satisfy LASC 3 requirements. MnTC Goal 3.

***[CHEM 210L] General Chemistry II Lab***

This laboratory accompanies Chem 210 General Chemistry II. MnTC Goal 3.

***[CHEM 290] Topics in Chemistry***

This is a topical course and may be repeated when the topic changes.

***[CHEM 297] Introduction to Research***

Introduction to Research will present an overview of the research being conducted in the Department and introduce students to some broader topics in chemical research. Students will also gain experience with searching and reading the chemical literature, review safety considerations in the research lab, and discuss instrumentation available in the Department.

***[CHEM 300] Inorganic Chemistry I***

Aspects of bond theory, periodicity, acid-base chemistry, redox chemistry, reaction kinetics, energetics and chemistry of the elements.

***[CHEM 304] The Environment and You***

This course explores the chemical underpinnings of a variety of environmental issues, such as pollution, energy production, and recycling, and how these issues play out in social, political, and economic arenas. Students will also have the opportunity to independently explore three topics in further detail. Credit not applicable to a chemistry major or minor. MnTC Goal 10.

***[CHEM 350] Organic Chemistry I***

Introduction to the classification, structure, reactions, and reaction mechanisms of carbon compounds.

***[CHEM 355] Organic Chemistry I Lab***

Techniques for the purification, synthesis, and characterization of organic compounds and the study of organic reactions.

***[CHEM 360] Organic Chemistry II***

The structure, nomenclature, reactions, reaction mechanisms, and synthesis of carbon compounds that contain oxygen and nitrogen.

***[CHEM 365] Organic Chemistry II Lab***

Purification, synthesis, and identification of organic compounds, and the study of organic reactions.

***[CHEM 380] Analytical Chemistry I with Lab***

Analytical applications of chemical equilibrium. Error analysis, chromatography, IR spectroscopy, UV spectroscopy, fluorescence and phosphorescence spectroscopic techniques in chemical analysis. Lab included.

***[CHEM 390] Topics in Chemistry***

This is a topical course and may be repeated when the topic changes.

***[CHEM 397] Undergraduate Research***

Research studies in all areas of chemistry. A research paper and/or oral presentation are required. May be repeated.

***[CHEM 400] Biochemistry I***

A survey of the chemistry and metabolism of living systems. Topics include buffers and biological buffering, structure, function and chemistry of proteins, carbohydrates, lipids, nucleic acids and enzymes, and introduction to metabolism and metabolic pathways.

***[CHEM 405] Biochemistry Laboratory I***

Representative experiments in the quantitation, isolation and metabolism of naturally occurring substances. Techniques include: assay development, column chromatography, protein and nucleic acid isolation and analysis, protein electrophoresis, and enzymology.

***[CHEM 410] Biochemistry II***

A survey of the chemistry and metabolism of living systems and nucleic acids biochemistry. Topics include study of catabolic and biosynthetic biochemical pathways and their regulation, chemical messengers and signal transduction, integration of metabolic pathways and nucleic acids biochemistry and other advanced biochemistry topics.

***[CHEM 420] Inorganic Chemistry II***

Transition metal chemistry, valence bond, molecular orbital, crystal field, and ligand field theory, molecular symmetry. Bio-inorganic models.

***[CHEM 425] Inorganic Chemistry II Lab***

Synthesis and spectroscopic study of inorganic compounds. Techniques include: vacuum line synthesis, high temperature methods, inert gas techniques and organometallic synthesis.

***[CHEM 440] Middle School/Secondary Science Teaching Methods***

Materials and methods appropriate for junior and senior high school classes and laboratories. Must be taken prior to student teaching. Same as BIOL 440 and PHYS 440.

***[CHEM 449] Topics in Inorganic Chemistry***

Selected topics such as coordination chemistry, bonding, acid-base and nonaqueous solvent theory, organometallic chemistry and inorganic biochemistry. May be repeated when topic is changed.

***[CHEM 450] Physical Chemistry I***

A survey of applications of physics and mathematics to chemical phenomena including thermodynamics, kinetics, and electrochemistry.

***[CHEM 455] Physical Chemistry I Lab***

Measurement of thermodynamic properties of gases, thermochemistry, electrochemistry, transport properties, and treatment of experimental data.

***[CHEM 460] Physical Chemistry II***

A continuation of physical chemistry 450. Topics include introduction to quantum theory, group theory, spectroscopy and statistical mechanics.

***[CHEM 465] Physical Chemistry Laboratory II***

A continuation of physical chemistry laboratory 455. Chemical kinetics, spectroscopy and molecular orbital calculations.

***[CHEM 469] Internship***

A supervised, practical experience in chemistry. A maximum of 12 internship credits may be applied to the degree.

***[CHEM 480] Analytical Chemistry II with Lab***

Instrumental analysis involving chromatography, spectroscopy and electrochemical techniques. QA/QC addressed. (3 lecture credits, 1 lab credit)

***[CHEM 490] Topics in Chemistry***

This is a topical course and may be repeated when the topic changes.

***[CHEM 497] Senior Thesis***

Research studies in all areas of chemistry. A comprehensive research report is required. Chem 497 should be taken only once.

***[CHEM 498] Seminar***

Presentation by students based on critical evaluations of scientific literature and/or independent research.

**Chinese**

***[CHIN 101] Beginning Chinese I***

An introduction to the basic sounds and structure of Mandarin Chinese. Intended to provide a foundation in the four language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. Chinese culture is also presented as an integral part of the course. Applicable toward East Asian Studies major and minor. MnTC Goal 8 effective fall 2012.

***[CHIN 102] Beginning Chinese II***

Fundamentals of Mandarin Chinese, second semester. Continues to develop the four language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. Applicable toward East Asian Studies major and minor. MnTC Goal 8 effective spring 2013.

***[CHIN 132] Introduction to Chinese Culture***

An introduction to the major aspects of Chinese culture from ancient times to the present. Topics include language, folklore, festivals, philosophy, religion, family, education, literature and daily life. Lecture, discussion, readings, and films in English. Applicable toward East Asian Studies major and minor. MnTC Goal 7.

***[CHIN 190] Topics in Chinese Language, Literature, and Culture***

Topics in Chinese language, literature, and culture. May be repeated since content may vary. Applicable toward East Asian Studies major and minor.

***[CHIN 201] Intermediate Chinese I***

Continued practice and development of the four language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. An expanded awareness of Chinese culture is also an integral part of the course. Applicable toward East Asian Studies major and minor.

***[CHIN 202] Intermediate Chinese II***

Continued practice and development of the four language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. An expanded awareness of Chinese culture is also an integral part of the course. Applicable toward East Asian Studies major and minor.

***[CHIN 290] Topics in Chinese Language, Literature, and Culture***

Topics in Chinese language, literature, and culture. May be repeated since content may vary. Applicable toward East Asian Studies major and minor.

***[CHIN 297] Independent Study in Chinese - Intermediate Level***

Selected project as agreed upon by student and instructor. May be repeated for a total of 4 credits. Credits may be applied toward East Asian Studies major and minor.

***[CHIN 390] Topics in Chinese Language, Literature and Culture***

Topics in Chinese language, literature, and culture. May be repeated since content may vary. Applicable toward East Asian Studies major and minor.



### ***[CHIN 397] Independent Study in Chinese - Advanced Level***

Selected project of advanced studies in Chinese language, literature, or culture as agreed upon by student and instructor. May be repeated up to a total of 4 credits. Applicable toward East Asian Studies major and minor.

## **Communication & Journalism**

### ***[COMM 100] Speech Communication***

The theory and practice of oral communication in public and interpersonal situations, stressing both content and delivery. MnTC Goal 1.

### ***[COMM 101] Introduction to Mass Media***

The study of the power and importance of mass media in national and international affairs with emphasis on the nature, functions and influence of broadcast media, print media, emerging mediums, advertising and public relations in the digital age. MnTC Goal 9.

### ***[COMM 110] Introduction to Communication Studies***

This course provides an overview of many of the contexts, concepts, and areas of research in the field of Communication Studies. This course will provide students with opportunities to explore and apply various communication competencies. MnTC Goal 5.

### ***[COMM 111] Argumentation and Debate***

This course introduces students to argumentation theory and provides the opportunity to practice skills in reasoning, argumentation, and critical thinking. The course focuses on multicultural arguments as they appear in politics, society, and the media. MnTC Goal 2.

### ***[COMM 200] Visual Communications***

A survey of the visual components that make up mass communications, including structural elements, psychological effects, and general visual literacy.

### ***[COMM 201] Interpersonal Communication***

This course is designed to explore various communication theories, based on the development of self and the development and maintenance of relationships with others.

### ***[COMM 202] Family Communication***

Family Communication is designed as an introduction to the communication phenomena in the family setting. The goal is to help one develop an understanding of how we use communication to develop, maintain, enhance, or disturb family relationships. Students will learn verbal and nonverbal skills which may help promote healthy family communication.

### ***[COMM 210] Media Writing***

Media Writing is designed to achieve the following outcomes: proficiency in the use of the parts of speech, proficiency in the use of Associated Press style relative to capitalization, abbreviations, use of numerals and punctuation, and proficiency in composition of media messages designed for print and broadcast journalism, public relations and advertising.

### ***[COMM 211] Group and Team Communication***

Presents theories of group and team communication, group dynamics, communication patterns, and role norms. Class designed around two fundamental components: experiential and cognitive. A substantive group research and problem-solving assignment is included.

### ***[COMM 220] Layout & Typography I***

The course is designed to develop proficiency in terminology, design principles, use of software, critical analysis, and the publication ready production of projects in layout and typography.

### ***[COMM 230] Photography***

The student will experience an introduction to the compositional and conceptual aspects of photography and an exploration of sequencing photographs. Options exist for both digital and film-based photography. Cameras can be rented from the department.

### ***[COMM 251] Video Production for Ad, News and PR***

The course is designed to develop proficiency in the terminology, pre-production planning, use of software and hardware, critical analysis, and production of video projects for advertising, news, and public relations.

### ***[COMM 283] Advertising Principles***

The course is designed to achieve the following learning outcomes: acquire an understanding of advertising theories and principles, how advertising is used, why it is used and how it impacts the American society and economy; acquire an understanding of the advertising industry that includes the function and operation of an advertising agency and the components of an integrated advertising campaign.

### ***[COMM 284] Public Relations Principles***

The course is designed to achieve the following learning outcomes: acquire an understanding of the principles, theories and practices of public relations; develop an understanding of the four-step process and how business, government and not-for-profit organizations use it to alter, adapt to or maintain their environments to achieve organizational goals.

### ***[COMM 285] Intercultural Communication***

Examines selected major theories of intercultural communication and applies them in analyzing, understanding and comparing the communication practices of different cultures and sub-cultures. Focuses upon how culture and society affect the specific rhetorical communication tactics and processes as well as non-verbal communication practices. MnTC Goal 7

### ***[COMM 290] Topics in Communication***

Study of a particular mass communications topic: exploration of emerging issues, methodologies, and new technologies related to the study or application of mass communications theory not addressed in other courses. May be repeated when topic varies.

***[COMM 295] Practicum***

Practical experience in a performance activity in Communication.

***[COMM 301] Business and Professional Communication***

Focuses on the application and practice of both oral and written communication skills for a variety of business and professional situations including job interviews, team and group interactions, and public presentations. This course also provides opportunities for students to explore issues of diversity and technology as related to professional communication.

***[COMM 305] Imaging & Photo Illustration***

Students will gain technical and conceptual skills in the manipulation of digital images for the fields of advertising and public relations. Projects involve acquiring images and producing creative manipulations that can be used for a variety of clients.

***[COMM 306] Advertising Copywriting***

The course is designed to achieve the following learning outcomes: an ability to analyze consumers; proficiency in the design and construction of advertising messages targeting specific consumers; proficiency in adapting the message copy to fit the mediums used to transmit the message; and proficiency in the public presentation of advertising copy.

***[COMM 307] Writing for Public Relations***

A writing intensive course for students in public relations; writing projects include public relations messages shared through media platforms such as e-mail, newsletters, blogs, news releases, publication pitch letters, fact sheets, brochures, annual reports, web pages, e-blasts, tweets, speeches, podcasts, broadcasts, public service announcements, and other forms of strategic communications.

***[COMM 308] Broadcast Journalism***

An introduction to the study of radio and television news. Students will study the field of broadcast journalism in the United States; the terminology associated with both radio and TV news, and broadcast writing style. Students will gain an understanding of foundational interviewing, storytelling and editing skills in order to produce stories for both radio and television news.

***[COMM 309] Reporting***

Reporting is designed to achieve the following outcomes: proficiency in writing both hard news and soft news; experience in integrating writing, editing and design through teamwork; competence in using Associated press style, grammar and syntax, as well as on-line and off-line research sources; skill in interviewing; and acquire an understanding of the theory and contemporary practice of journalism.

### ***[COMM 310] Rhetorical Theory and Criticism***

Examines the theory and criticism of rhetoric from its beginnings in classical times to its contemporary development. Discusses classical, British, contemporary, and postmodern theories of rhetoric and rhetorical criticism. MnTC Goal 6.

### ***[COMM 311] Principles of Persuasion***

This course will explore the logical and psychological theories of persuasion as they occur in a range of communication situations.

### ***[COMM 313] Communication, Technology, and Culture***

Advancements in communication technology, including the Internet, have transformed the ways in which individuals communicate and form communities and has become a hallmark of contemporary Western culture. This course explores the dramatic changes in human communication as a result of such technology. Particular emphasis is given to epistemological and ontological implications of the move to a digital culture.

### ***[COMM 315] Communication Theory***

Through lecture, writing, and discussion, students will explore the discipline of communication including basic theories of interpersonal, group, intercultural, and organizational communication.

### ***[COMM 317] Training and Development***

This course examines the application of communication theories in the context of training and development. Development, design, and presentation of training materials will be covered, along with facilitation of training sessions. Class includes significant experience in program development and implementation.

### ***[COMM 319] Communication Research Methods***

Research in communication studies employs a variety of empirical methods to generate theories about human communication phenomena. This class introduces students to social-scientific methodologies including quantitative and qualitative approaches. Students are expected to both critically evaluate research and perform original research related to the discipline.

### ***[COMM 320] Layout & Typography II***

The course is designed to develop additional proficiency in terminology, design principles, use of software, critical analysis, and the publication ready production of projects in layout and typography.

### ***[COMM 321] Copy Editing***

Copy Editing is designed to achieve the following outcomes: competence in using Associated Press style, grammar, and syntax; skill in headline writing, cutline writing, photo and graphic editing, page layout and design; experience in producing a newsletter through the integration of writing, editing, and design; knowledge of current affairs; and an understanding of the theory and contemporary practice of copy editing.

### ***[COMM 324] International Communications***

The course is designed to achieve the following outcomes: students will acquire a geographical knowledge of countries (including basic demographic and media data) and world regions; experience in intercultural cyberspace correspondence; acquire knowledge of a non-Western country gained from non-U.S. on-line and off-line publications; ability to gather information from diverse sources, to analyze the findings critically and rationally using problem-solving skills, and to communicate effectively through clear writing; and an understanding of the ongoing Third Communication Revolution. Students will also acquire a knowledge of the major controversies related to international communication. MnTC Goal 8.

### ***[COMM 327] Editing Public Relations Copy***

A course for students in public relations that includes experiences in the process of editing and adapting public relations messages intended for targeted publics involving multimedia delivery platforms. The course focuses on the process and principles of copy-editing, adapting the message for multimedia platforms, publication design, and evolving stylistic considerations in the public relations profession, as well as assessing message effectiveness.

### ***[COMM 330] Photojournalism***

Photojournalism is designed to achieve the following learning outcomes: an ability to produce feature, sports, spot news, and environmental portrait photographs for the printed page; proficiency in shooting and laying out photo stories; and an introduction to the history and legal aspects of photojournalism.

### ***[COMM 331] Photo Editing***

The class is designed to achieve the following outcomes: proficiency to electronically scan, manipulate, sequence and lay out photographs for publication.

### ***[COMM 341] Television News Writing***

A practicum whereby students participate in the development of a weekly television program or project as part of a series of newscasts, public affairs programs or informative programs. May be repeated for credit.

### ***[COMM 342] Television News Reporting***

A practicum whereby students learn to produce television news packages. Reporters learn to cover stories as assigned and work along with photographers to construct weekly news packages. Those enrolled in this course must also take Television News Editing. May be repeated for credit.

### ***[COMM 343] Television News Photography***

A practicum whereby students learn to produce television news packages. Photographers shoot stories as assigned and work along with reporters to construct weekly news packages. Those enrolled in this course must also concurrently take TV News Editing. May be repeated for credit.

### ***[COMM 344] Television News Editing***

A practicum whereby students learn to produce television news packages. Video editors work with reporters and photographers to construct weekly news packages. They may be assigned also to edit video for voice-overs, sound bites and closing credits. Video editors edit television news packages with natural sound, natural lighting and video sequences. May be repeated for credit.

***[COMM 345] Television News Producing***

A practicum whereby students learn to produce television news programs. Producers stay informed about news stories, ensure that the future file is up-to-date, and assign stories to reporters, photographers, and videotape editors. Producers select readers, voice-overs, sound bites and packages for inclusion in a weekly newscast, determine the order of these stories and develop a smooth-flowing program within time constraints. Producers coordinate numerous aspects of the news operation and provide feedback to other participants. May be repeated for credit.

***[COMM 351] Messaging for Mobile Media***

A course designed to teach the principles, processes, and techniques of communicating through the use of mobile media platforms. The learning outcomes of this course include: 1) develop an awareness and understanding of mobile media platforms; 2) develop an awareness and understanding of the various messaging strategies and tactics available for mobile media users; 3) develop proficiency in the construction of mobile media messaging; 4) develop proficiency in the adaptation of the mobile message for evolving mobile media platforms; and 5) develop proficiency in evaluating the effectiveness of the mobile message using industry-based messaging standards.

***[COMM 352] Social Media Campaigns***

Introduction to the theory, application and criticism of social media communication for producers of online advertising and public relations campaigns. The course is designed to achieve the following learning outcomes: 1) to develop an awareness and understanding of the nature of the communications transaction occurring in a social media campaign; 2) to develop an awareness and understanding of the various media platforms encompassed under the rubric of social media; 3) to develop a proficiency in the design and construction of a social media campaign targeting a specific public(s) of an extant organization; and 5) to develop an ability to critically evaluate the effectiveness of a social media campaign.

***[COMM 353] Producing Sports Audio and Video***

A course designed to teach the principles and techniques of audio and video production for use in online and live sporting event situations. The learning objectives of this course include: to develop an awareness and understanding of the audio and video techniques of production employed in a sports broadcast situation; to develop an entry level proficiency in the use of audio and video production equipment; to develop an understanding of the process to stream audio and video messages over the internet and/or on a stadium display board; to demonstrate an ability to function effectively as a member of a sports broadcasting production team; and to demonstrate an ability to produce a live or recorded broadcast that meets an entry-level standard of excellence in the sports broadcasting industry.

***[COMM 354] Social Media Metrics***

A course designed to teach the principles, processes, and techniques of evaluating the social media choices using industry established metrics. The learning objectives of this course include, to: 1) develop an awareness

and understanding of the social media measurement process; 2) develop an awareness and understanding of the various metrics available for measuring social media objectives; 3) develop an understanding of the criteria involved in selecting an appropriate metric for measuring a given outcome; 4) provide an experience in the measurement of an objective(s) in a social media campaign; 5) develop an understanding of the process of analyzing and interpreting the data generated in a social media campaign; and 6) develop an understanding of the process of reporting the results of measurement in a social media campaign.

### ***[COMM 365] Media Planning***

The course is designed to develop an understanding of the principles involved in the selection of media; proficiency in the evaluation of syndicated media research; proficiency in planning the strategic use of media placements; proficiency in the estimation of media costs; proficiency in the execution of media buys at the local and national levels; and proficiency in the development of a media schedule.

### ***[COMM 366] Personal Selling***

A practical course in professional selling that explores the role of personal selling in the marketing mix and the development of effective techniques for the modern sales executive. Same as MKTG 330.

### ***[COMM 373] Radio/Television Performance***

Theory and practice in the professional areas of radio and television performance, from auditioning through final tapings.

### ***[COMM 375] Strategies and Tactics in Public Relations***

The course is designed to achieve the following learning outcomes: 1) to analyze a public relations case study and identify the salient issues; 2) to identify the defined objectives in a case study; 3) to develop an awareness and understanding of the strategies and tactics employed in a case study; 4) to develop an awareness and understanding of the analytics used to evaluate the achievement of both impact and output objectives in a case study; 5) to accumulate a repertoire of strategic public relations strategies and tactics that can be used to respond to a future PR situation; and 6) to construct a written plan of professional, entry-level, proficiency that delineates a public relations response to a challenge, opportunity or problem in public relations.

### ***[COMM 376] Crisis Communications***

Crisis Communications is a course designed to develop an awareness and an understanding of the principles and communication processes used to respond to a crisis that threatens the image, credibility and/or viability of an organization. Topics include the typologies of a crisis, the stages of a crisis, the process of developing and administering a comprehensive crisis communications plan, the strategies and tactics of messaging and interacting with media and other key publics in a crisis setting, and an examination and critique of case histories of an organization's response to an actual crisis.

### ***[COMM 379] Ad Agency Practicum***

Flypaper Creative Services is a student-run ad agency centered in FR 256. The agency interacts with actual clients, mostly nonprofits or start-up companies, and produces materials like posters, brochures, advertisements, television and radio commercials, web sites and/or marketing plans. Participants in the agency serve as account managers, copywriters or designers. Participation in this class is by special permit

only, granted to those who demonstrate competence in the areas of design, copywriting and account management. Participants receive three credits per semester and are encouraged to participate for more than one semester.

### ***[COMM 380] Foundations of Sports Communication***

The theory and practice of sports communication exploring its role in sports programming and its potential as a communication's career. The course will examine the nature and processes of strategic sports communication in the sports organization as well as its establishing and maintaining relationships with its targeted publics.

### ***[COMM 381] Sports Information and the Media***

The course deals with the role of the sports information director in creating sports publicity. Attention is concentrated on how the sports information director serves as an information broker between organizations, both professional and amateur, and media outlets.

### ***[COMM 382] Sports Promotions***

The course focuses on the promotion of sports through marketing, sales and public relations in a seminar with experts in sports and related industries. Sports Promotions is designed to achieve the following learning outcomes: 1) develop an understanding of the role sports promotions plays in building relationships with target publics; 2) develop an understanding of the role that sports promotions plays in communicating information; 3) develop an understanding of how to construct a sports promotions tactic; 4) develop an understanding of the tactical implementation of a sports promotion; 5) develop an ability to evaluate the effectiveness of a sports promotion tactic; and 6) provide an experiential opportunity to plan, implement, and evaluate a sports promotion activity.

### ***[COMM 383] Event Planning***

Event Planning is a course designed to explore the public relations role that a special event(s) plays in building and maintaining a relationship(s) with a target audience(s), as a part of an integrated marketing communications plan (IMC). This course provides both a theoretical and an experiential exposure to the processes of planning, implementing, and evaluating a special event. The learning outcomes of the course are to: 1) develop an understanding of the strategic role that special events plays as a part of an IMC plan; 2) develop an understanding of the project management process employed to develop a special event as a public relations tactic; 3) develop an understanding of the components involved in effectively designing the public relations special event; 4) develop an understanding of how to implement special events as a public relations tactic; 5) develop an understanding of the process used to evaluate the effectiveness of a public relations special event; and 6) provide an experiential learning opportunity in the planning, implementation, and evaluation of a public relations special event.

### ***[COMM 390] Topics in Communication***

Study of a particular mass communication topic: exploration of emerging issues, methodologies, and new technologies related to the study or application of mass communications theory not addressed in other courses. May be repeated when topic varies.

### ***[COMM 395] Practicum***



Practical experience in a performance activity in Communication.

***[COMM 400] Mass Media Ethics and Issues***

Study of ethical considerations in advertising, journalism and public relations as well as major contemporary issues in the mass media. Emphasis will be placed upon research findings regarding mass media effects and the resultant alternatives for policymakers, practitioners and consumers.

***[COMM 401] Organizational Communication***

Focuses on the study of communication processes, the management of meaning through symbolic interactions, within organizational contexts. To study symbolism is to explore how meanings on which people base action are constructed, communicated, contested, and changed. The first part of the class examines perspectives/theories of organizing and communication. The second part of the class investigates specific topics of organizational communication research (e.g., power, technology, democracy).

***[COMM 402] Introduction to Publishing***

The course familiarizes students with small press publishing and with the various facets of the writing, publication and marketing processes. It also includes an orientation to New Rivers Press, a working non-profit press located at MSUM, and a daylong field trip to various publishing facilities in the Minneapolis-St. Paul area.

***[COMM 403] Communications Law***

Examination of the legal and constitutional history of freedom of speech and press, and a consideration of the legal philosophy bearing upon the communications media and a system of freedom of expression. Students will explore leading cases involving freedom of speech, press, assembly and petition.

***[COMM 405] Writing for the Web***

As a result of actively participating in the course, students should be able to: (1) Understand changing media consumption and production patterns as media increasingly converges on the Web, (2) gain and build proficiency in writing and crafting media messages designed specifically for Web presentation, (3) identify and use evolving mass communication methods not solely available to print or broadcast media, and (4) understand best writing practice for connecting with Web-based audiences.

***[COMM 406] Feature Writing***

Feature Writing is designed to achieve the following outcomes: proficiency in writing feature stories for publication in a print or an online media outlet; develop an understanding of the process of writing features; competency in adapting to the variances required in a feature story when the medium of publication changes; and competency in pitching potential feature stories to editors, as well as the process of adapting feature stories to meet requisites imposed by paying clients.

***[COMM 407] Magazine Writing***

Magazine Writing is designed to achieve the following outcomes: proficiency in writing appropriate materials for publication in a print or an online magazine; an understanding of the editorial and production processes of

successfully publishing in print and online magazines; and competency in pitching a prospective story to publishers. Writing Intensive course as of spring 2013.

***[COMM 410] The Rhetoric of Popular Culture***

Examines how popular culture artifacts generate meanings in contemporary society. Surveys various rhetorical approaches to understanding popular culture including dramatistic, Marxist, feminist, media-centered, and cultural.

***[COMM 411] Political Campaign Communication***

This class explores political campaign rhetoric by looking at the theories and research that contribute to our understanding of the process. The course discusses the current campaign in light of these theories and research, but also takes a broader view towards political campaigning in general. MnTC Goal 9.

***[COMM 412] Research Practicum***

Provides opportunity for students to conduct research. May be repeated for credit.

***[COMM 414] Health Communication***

Focuses on how health, illness, and healing acquire meaning through symbolic interactions located within social, political, economic, and cultural structures. This course explores various arenas in which health is socially constructed including interpersonal interactions, small group and organizational settings, public discourse and popular culture. Across contexts, there is an emphasis on exploring current issues facing the health care industry including telemedicine, financial reform, the patients' rights movement, and other factors influencing health communication.

***[COMM 415] Teaching Methods: Communication Studies***

Methods of conducting high school communication studies courses and activities, structuring of curriculum, selecting and developing course materials, and methods of evaluation.

***[COMM 416] Special Projects in Speech Communication***

Advanced individualized creative or investigative work in a particular phase of communication studies. May be taken more than once if content is substantially different.

***[COMM 417] Academic Service-Learning Practicum***

Provides opportunity for students to apply classroom concepts and theories to an academic service-learning project. May be repeated for credit.

***[COMM 420] Digital Storytelling***

In this advanced online journalism workshop, students synthesize storytelling forms -- writing for Web, broadcast and print; videography; social media; photography; and editing. Legal and ethical issues of online publishing are addressed.

### ***[COMM 423] Marketing Communications***

A survey of the elements of marketing, advertising, public relations, sales promotion, and personal selling-- with a strong emphasis on the strategic integration of these methods to achieve synergy in their application in the marketplace.

### ***[COMM 430] Documentary Photography***

The class is designed to achieve the following outcomes: an ability to research, photograph, organize and present a group photographic project documenting some aspect of our region. Repeatable for credit.

### ***[COMM 431] Photo Story***

The class is designed to achieve the following outcomes: an ability to research, photograph, organize and present a group photographic project documenting some aspect of our region. Repeatable for credit.

### ***[COMM 440] Broadcast Documentary***

History and analysis of non-fiction documentation via radio, film and video. Each student will write a treatment and shooting script for a documentary and participate in the development of a television documentary program.

### ***[COMM 459] Advertising Campaign Research***

The course is designed to achieve the following learning outcomes: an ability to analyze an advertising campaign situation; an ability to identify salient issues relative to the market, consumer, media and product; an ability to design and construct a research plan; proficiency in conducting primary and secondary research using selective research methodologies drawn from content analysis, historical-critical analysis, survey, in-depth interview and focus groups. The AAF campaign topic is used and student membership in AAF is required.

### ***[COMM 460] Advertising Campaign Execution***

The course is designed to achieve the following learning outcomes: proficiency in the design and production of a strategic campaign document using the AAF topic that includes a situation analysis, a market plan, a media plan, a promotions plan, a public relations plan, an advertising plan, a budget, a campaign schedule and a plan of evaluation, oral presentation of the campaign at the annual AAF competition. Membership in AAF is required.

### ***[COMM 461] Ad Portfolio Development***

Students in this course will develop portfolio elements such as advertisements, logos, posters, brochures and banner ads. The course is for students who are interested in working in a creative department of an ad agency or in-house advertising department. Individual portfolio elements are sent out for evaluation to working professionals from the local area, the region and the nation. In order to be part of a student's portfolio, the piece must have been approved by at least one outside source. At the end of the semester, students will have at least 12 approved pieces for their portfolios and will have both a physical portfolio and an online portfolio.

### ***[COMM 462] Practicum in Publishing***

This course is designed to familiarize students to the working functions of a small press literary publishing house through lectures, demonstrations, and supervised group activities such as participating on editorial book teams, writing teacher guides for the website for New Rivers Press books, developing marketing plans, reading tours, distributor marketing packets etc. All projects are presented in class to foster a broader class understanding of the overall activities of a small press.

### ***[COMM 469] Internship***

Communication/Mass Communication Internship 1-12 credits. Students need to be a major in the School of Communication and Journalism. A maximum of 12 internship credits may be applied to the degree (Communication Studies students may apply 6 credits to the major). Students must be of junior standing.

### ***[COMM 470] Public Relations Campaign Research***

The course is designed to achieve the following learning outcomes: an ability to construct a research plan; proficiency in conducting primary and secondary research using selective research methodologies drawn from content analysis, historical-critical analysis, survey, in-depth interview and focus groups. The PRSSA campaign topic is used and student membership in PRSSA is required.

### ***[COMM 471] Public Relations Campaign Execution***

The course is designed to achieve the following learning outcomes: proficiency to design and produce a strategic campaign document that includes a situation analysis, an analysis of the PR problem and/or opportunity, a statement of objectives, an articulation of programming executions and an identification of the mechanisms to be employed in the evaluation of a public relations campaign. Membership in PRSSA is required.

### ***[COMM 490] Topics in Communication***

Study of a particular communication topic: exploration of emerging issues, methodologies, and new technologies related to the study or application of communications theory not addressed in other courses. May be repeated when topic varies.

### ***[COMM 492] Online Journalism Workshop***

A capstone seminar designed to provide students with an opportunity to produce an online publication. Repeatable for credit.

### ***[COMM 496] Communication Studies Senior Seminar***

Capstone course for Communication Studies majors; proposal, completion, and presentation of projects; pre-professional skills; written exam integrating and applying knowledge from separate courses. Grade of "C-" or higher is required for graduation.

### ***[COMM 497] Individual Study***

Individual problems in areas of specific interest to the student.

## **Community Health**

### ***[COMH 301] Women's and Children's Health***

The course will address the dynamic health status of women and children within the family, community and health care system. Emphasis will be placed on theories and principles which result in a foundation for critical thinking, application of research, and use of knowledge as it relates to caring for children and families from diverse cultures and environments. Students will develop an understanding of the status of women's and children's health with emphasis on nutrition, common diseases, and health indicators. The laboratory portion of the course will reinforce the lecture content and address women's and children's health in practice, gender-specific nutrition, gender differences in anatomy and physiology and epidemiology of diseases important to women and children.

### ***[COMH 315] Health Agencies and Services***

A survey of community health agencies and programs at the national, state and local levels.

### ***[COMH 418] Global Health Issues***

This course is designed to provide an introductory perspective of world health issues and policies. Professionals practice in the era of globalization, regardless of whether they personally plan to live or work in another country. An understanding of various factors influencing the health status of those living outside of the U.S. will be gained. This course is as much about how to study and think about global health problems and relationships as it is a course about specific global issues. MnTC Goal 8.

### ***[COMH 468] Practicum Seminar***

This Seminar course is designed for students majoring in Community Health to prepare students for their internship. A maximum of 1 credit can be taken towards seminar course.

### ***[COMH 469] Internship***

Designed for Community Health majors. Involvement in field work by placement in health related governmental, volunteer, non-profit, or commercial agencies. A maximum of 12 internship credits may be applied to the degree.

### ***[COMH 497] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

## **Computer Science & Information Systems**

### ***[CSIS 103] Computer Concepts and Applications***

Introduction to basic computer concepts including hardware and software. Introduction to and hands-on experience with Windows, spreadsheets, word processors, database management systems, and presentation software as used in a business setting.

### ***[CSIS 104] Spreadsheet and Database Applications***

A brief review of Windows, word processing and presentation software. In-depth coverage of a spreadsheet and a database management system as used in a business setting. Familiarity with Windows and word processing is required.

***[CSIS 104A] Advanced Spreadsheet Topics***

Understand and apply the advanced features of spreadsheet software such as templates, financial functions, importing/exporting data, solving complex problems, and creating and manipulating lists. Familiarity with spreadsheets is required.

***[CSIS 115] Introduction to MacOS X***

An introduction to the effective and knowledgeable use of MacOS X and associated technologies.

***[CSIS 145] Introduction to Information Systems***

This is an introduction to information systems fundamentals and modern information systems architectures.

***[CSIS 152] Introduction to Computers and Programming I-a***

Introduction to problem solving, algorithm development, elementary data structures, data abstraction, and structured programming in a high-level language.

***[CSIS 153] Introduction to Computers and Programming I-b***

Continuation of the introduction to problem solving and programming techniques with a focus on application of object oriented techniques for defining and implementing data structures.

***[CSIS 190] Topics in Computer Science & Information Systems***

A study of special topics not offered regularly in other CSIS courses. May be repeated when the topic is different.

***[CSIS 222] Computer Maintenance***

This course covers the operation, diagnosis, troubleshooting and basic repair of microcomputer components. Topics include hardware compatibility, system architecture, memory, input devices, video displays, disk drives and printers.

***[CSIS 241] Introduction to Web Design and Development***

Introduction to web design and development using HTML, CSS, and JavaScript.

***[CSIS 252] Introduction to Computers and Programming II***

Continuation of CSIS 153 with emphasis on data structures. Discussion of representations and processing techniques for lists, strings, trees, graphs, and records.

***[CSIS 290] Topics in Computer Science & Information Systems***

A study of special topics not offered regularly in other CSIS courses. May be repeated when the topic is different. Consent of instructor is required.

### ***[CSIS 304] Databases***

This course provides a solid and practical foundation for the design, implementation, and management of database systems. The relational database model, relational databases, and Structured Query Language (SQL) are discussed in all details.

### ***[CSIS 311] Server-Side Scripting***

An introduction to server-side scripting. Scripts will be used to generate functional web pages. In addition, databases will be created and accessed through server-side scripts.

### ***[CSIS 316] Ethics in the Information Age***

An introduction to ethical issues associated with the Information Age. A description of what the Information Age is, how it came to be, and what makes it different from the previous age. Students will study new ethical issues arising from, or given increased prominence by, the Information Age, advances in information collection, storage, retrieval, processing, and dispersion. Ethical issues to be covered include privacy, surveillance, accuracy, free speech, intellectual property, Internet crime, identity theft, spam, information access, information dispersion, and some consequences of data mining and emerging technologies. A significant portion of the assignments in the course require both formal and informal writing. It is critical that learners can express themselves in writing, expressing their views on ethical issues that continue to develop as new technologies emerge. Written work will be emphasized as shown: • Weekly written discussions • Weekly “polls” (3 per week – an article related to current technological developments will be posted, and a reflection about the ethical considerations will be required.) • Persuasive Paper (Each week, one of the required sections of the paper will be handed in as a draft. Feedback will be provided on each draft. The revised (complete) paper is due the last week of the course. MNTC Goal 9

### ***[CSIS 320] Architecture***

Basic principles of processor organization, machine instructions, addressing modes, memory management, and input/output operations. Includes coverage of assembly language.

### ***[CSIS 335] Graphical User Interface Programming***

Techniques and tools for the development of graphical user interfaces will be discussed. Event-driven and object-oriented programming techniques will be highlighted. The course provides experience with a visual programming environment, and introduction to design issues for user interfaces, and an introduction to creating visual interfaces for database environments.

### ***[CSIS 336] C#.Net Programming***

A comprehensive introduction to programming using Visual C#.Net for students with experience in at least one high-level programming language. The course provides students with all the necessary skills to build Windows applications, Web applications, and XML Web services.

### ***[CSIS 340] Software Engineering***

A study of the software development life-cycle including Requirements, Design, Implementation, Testing, Maintenance and Quality Assurance. Tools, techniques and methods will be studied. Project required.

### ***[CSIS 341] System and Network Administration***

This course is designed to provide students with an understanding of the activities and responsibilities of an administrator of an enterprise computer system and/or computer network. It focuses on the installation, configuration, and maintenance of system software, the management of users and resources and the deployment of network services. Students will investigate topics through research, discussion, and hands on practice. Junior standing in a CSIS major is required. Prior or concurrent enrollment in CSIS 349 is required.

### ***[CSIS 349] Networks and Data Communications***

Introduction to concepts and terminology of data communications technology. Local area and Long-haul networks; network architecture models and protocols; communications hardware, standards, media, signaling concepts, and channel characteristics; error prevention, detection and correction; distributed data processing and data communications trends. Project required.

### ***[CSIS 349L] Networking and Data Communications Lab***

Lab to accompany CSIS 349: Networking and Data Communications. Taken concurrently with CSIS 349, provides the following: A study of how TCP/IP protocol software functions and interacts to facilitate communication across an internet. The Client/Server Model, its service techniques, efficiency and security issues are investigated in detail. Programming project(s) required.

### ***[CSIS 352] Advanced Concepts in Programming***

Continuation of CSIS 252 with emphasis on the implementation of data structures, implementation alternatives, and algorithm analysis.

### ***[CSIS 360] Linux Programming and Development Tools***

An introduction to UNIX programming and program development tools. Considers the UNIX file system, shells, scripting languages, system calls, signal handling, interprocess communication, and tools for constructing, archiving, debugging, testing and installing software products.

### ***[CSIS 365] Mobile Application Development & Programming***

The course provides an introduction to the design and implementation of applications for mobile devices. It addresses creating and deploying applications. Topics include architecture overview, the application lifecycle, mobile APIs, mobile development tools, design of the user interface, and integrating apps with a database.

### ***[CSIS 390] Topics in Computer Science and Information Systems***

Discussion of current topics not included in other Computer Science and Information Systems courses.

### ***[CSIS 405] E-Commerce and M-Commerce Technologies***



This course introduces students to both the theory and practice of conducting business over the Internet and World Wide Web. The course focuses on the technology infrastructure that forms the foundation for e- and m-commerce.

### ***[CSIS 430] Operating Systems***

A study of operating systems as a resource manager with emphasis on process management and synchronization, CPU scheduling, deadlocks, memory management, virtual memory, file management, I/O systems, and distributed systems. Project required. Prior or concurrent enrollment in CSIS 352 is required.

### ***[CSIS 433] Design, Implementation and Support of Information Systems***

The course is dedicated to object-oriented design and implementation using contemporary design principles and patterns. The object-oriented approach of this course is based on Unified Modeling Language (UML). The course provides up-to-date coverage of adaptive and agile techniques and processes, and emphasizes layered architectures and Web development.

### ***[CSIS 434] Modern Software Development***

Modern Software Development

### ***[CSIS 435] Compilers***

Organization of compilers; transition graphs, lexical analyzers, regular expressions and lexical analyzer generators; context-free grammars, top-down and bottom-up parsers, and parser generators; error recovery. Students are expected to carry out a project which involves developing a front-end (lexical analyzer, parser and 3AC generator) of a compiler for a hypothetical Pascal-like language. In addition to the listed prerequisite, junior standing in a CSIS major is required.

### ***[CSIS 441] Network Security***

This class addresses those fundamental issues confronting today's network administrator. Topics covered include LAN subnetting and router configuration, security policy development, data security and encryption, access control, packet filtering, perimeter protection, intrusion detection, and disaster recovery. The amount of time spent on each topic and on current issues will vary with the interests/composition of the class. Junior standing in a CSIS major is required.

### ***[CSIS 446] Intelligent and Predictive Systems***

Introduction to the concepts and tools used in the development of decision support systems, executive information systems and expert systems including the systems development process and strategy for developing such systems. Junior standing in a CSIS major is required.

### ***[CSIS 450] Programming Languages***

An examination of underlying concepts in high-level programming languages and techniques for their implementation in a selected group of such languages along with a discussion of the interrelationship between programming and programming languages. Junior standing in a CSIS major is required.

### ***[CSIS 469] Internship***

Opportunity for students to supplement classroom learning with field work with a computer-using agency. A maximum of 3 credits applicable toward the major. Junior standing in a CSIS major is required.

### ***[CSIS 490] Topics in Computer Science and Information Systems***

Discussion of current topics not included in other Computer Science and Information Systems courses. Up to 3 credits can be applied to the major. Junior standing in a CSIS major is required.

### ***[CSIS 492] Senior Seminar***

Library and independent study of advanced computing topics followed by oral and written presentations. Students should plan to take this course in the year that they graduate. Senior standing in a CSIS major is required.

### ***[CSIS 494] Undergraduate Research***

Undergraduate research of advanced topics under the guidance of department faculty. Up to 3 credits can be applied to the major. Junior standing in a CSIS major is required.

## **Construction Management**

### ***[CM 105] Introduction to Construction Management***

An overview of the construction industry which introduces the student to the duties and responsibilities of the professional construction manager. Lectures, field trips, and speakers will expose students to the fundamentals of construction techniques and methods employed by professionals in the industry with an emphasis on career opportunities.

### ***[CM 190] Topics in Construction Management***

This is a lower division topical course in Construction Management. The course may be repeated when the topic is different.

### ***[CM 200] Construction Surveying***

An introduction to the processes and calculations used by construction surveyors, including measuring distances and angles, direct differential leveling, locating line and grade on a construction site, and processes specific to construction surveying.

### ***[CM 200L] Construction Surveying Lab***

Hands-on experiences with transit, level, and total station. Measuring distances and angles, direct differential leveling, and construction site layout.

### ***[CM 205] Professional Growth Seminar I***

The course content is directed towards the overall professional growth of students who are passionate about a career in construction. The course establishes standards for promoting ethical and professional practices in construction. Oral and written communication assignments include, but are not limited to; resume application, cover/thank you letters, proper interviewing skills, an individual presentation, and an assessment of personal ethics.

### ***[CM 216] Construction Graphics***

This course introduces construction printreading fundamentals and utilizes examples related to residential construction. Course material reinforces methods of construction/terminology and appropriate use of building materials. Students will utilize 3-D CAD modeling software for the design and layout of a residential construction project. Through the creation of a set of construction drawings, lecture materials will be reinforced while emphasizing the design process of a construction project. Students are expected to use CAD software in subsequent coursework and for CM 492 - Capstone Experience. (3 Credits, Prerequisites: none)

### ***[CM 220] Commercial Building Methods and Materials***

Theories and principles of commercial building construction materials and methods will be discussed. The course lectures will be structured in accordance with the Construction Specifications Index (CSI) format of work divisions. (CSI) format of work divisions. (Division 1-14 General; Division 21-23 Mechanical; Division 26-28 Electrical; Sitework Div. 31-35)

### ***[CM 230] Estimating I: Quantity Survey***

Students will study basic principles and practices of estimating focusing on quantity survey. From a set of commercial building working drawings and specifications, students will perform quantity labor, material, and equipment takeoffs. They will learn quantity survey best practices necessary to effectively estimate the cost of a construction project. Prerequisite: CM 216 and CM 220 or concurrently enrolled

### ***[CM 254] Mechanical/Electrical Systems***

A study of mechanical and electrical construction, emphasizing principles of heating, cooling, ventilation, water supply, waste disposal, electrical distribution and code requirements.

### ***[CM 290] Topics in Construction Management***

This is a lower division topical course in Construction Management. The course may be repeated when the topic is different.

### ***[CM 325] Heavy/Highway Construction Materials***

Course subjects include a study of the basic engineering properties of soils and compaction applications. Other topics include how concrete and asphalt are used as construction materials and analysis of their engineering properties. Design and construction applications of flexible and rigid pavements are presented.

### ***[CM 326] Heavy/Highway Construction Materials Lab***

Lab will include activities which help the student better understand the engineering properties and field processes associated with fine and coarse-grained soils, concrete, and asphalt. Must enroll concurrently in CM 325.

### ***[CM 327] Sustainability in the Built Environment***

The purpose of the course is to provide an overview of living in a sustainable environment and what we can do as a society to measure our resource use. Also, to encourage a change in our views regarding our limited resources and our overuse of the ecosystem by understanding our own culpability. Student awareness of energy conservation is modeled through construction principals that can be broadly applied to everyday lifestyle changes in our daily activities including where we live, where we work and the consumer choices we make in those environments. The U.S. Green Building Council and Leadership in Energy and Environmental Design (LEED) criteria are discussed. Major alternatives to LEED will also be covered. This course is open to all students. MnTC Goal 10.

### ***[CM 335] Estimating II-Pricing and Productivity***

Students will learn the fundamentals of pricing out a quantity survey and the relationship of how productivity factors are used to formulate unit pricing. They will estimate the material, labor, equipment, subcontractor, and overhead cost of the commercial building project that was completed in CM 330. "Timberline" estimating software is utilized extensively as a basis for learning principles of computerized estimating. Job cost accounting procedures are emphasized.

### ***[CM 340] Planning and Scheduling***

Theories and principles of construction planning and scheduling will be studied. Students will use the Critical Path Method as a primary technique of planning, scheduling, and monitoring work. The students will identify required activities, resources and cost required to complete monitor a project throughout the construction process. Students will be required to complete both manual and computer scheduling assignments. Students will use "Primavera" scheduling software assigned projects.

### ***[CM 350] Structural Analysis***

Students will understand fundamental concepts for the design and construction of structures, both temporary and permanent. Students will demonstrate knowledge of design processes by appropriate selection of structural members for given loading conditions. Topics include beam and column design for both structural steel and wood, tributary loads, scaffolding applications in construction, concrete formwork design, bridge construction, and temporary falsework applications.

### ***[CM 365] Construction Safety***

The course focus will be on the planning and administration of construction safety programs. Other topics include the history and development of Federal and State Construction safety standards and methods for abatement and control of job site hazards to develop a safe construction project. Junior standing is required.

### ***[CM 370] Construction Documents and Specifications***

This course will focus on the terms and concepts of construction contracts and documents. Procedures used to prepare construction specifications and contracts using the CSI format will be covered. The course discusses the liabilities and incentives for various kinds of construction contracts.

***[CM 380] Pre-Construction Services***

This course will analyze different topics of pre-construction services contractors can offer and the different methods they are delivered. Students will develop a mock construction company; developing the necessary documents to market and solidify their business. Students will also submit and present a professional pre-construction proposal.

***[CM 390] Topics in Construction Management***

This is an upper division topical course in Construction Management. The course may be repeated when the topic is different.

***[CM 425] Equipment Productivity and Analysis***

A study of planning, estimating, and managing performance of commonly recognized construction equipment. This course will emphasize the factors that govern or control equipment productivity on construction projects. Students will also study operating and ownership costs.

***[CM 434] Construction Cost Analysis***

This course will analyze a contractor's ability to bid, bond, and perform a construction project. Students will also set up and analyze a construction budget/cost control systems that will effectively identify cost overruns and which can be used to bid future similar projects.

***[CM 445] Contractor Quality Management***

Contractor Quality Management is a management philosophy that includes design and implementation of detailed Contractor Quality Program. The quality planning document outlines a thorough step-by-step process which ensures the highest quality of construction for the completed project in a safety conscious environment.

***[CM 460] Project Administration***

Students will be exposed to the daily construction administrative procedures and responsibilities which occur when managing a construction project. Reporting procedures will be emphasized, along with job site and home-office documentation.

***[CM 469] Internship***

Available to all majors in Construction Management. Approved practical work experience. Supervised by departmental faculty.

***[CM 470] Construction Law***

An in-depth study emphasizing the legal issues and ramifications involved in the implementation and management of contracts, specifications, and other construction documents. Other issues, strictly related to the construction industry, will be discussed including labor laws, unions, and the rights and responsibilities of the contracting parties.

***[CM 490] Topics in Construction Management***

This is an upper division topical course in Construction Management. The course may be repeated when the topic is different.

***[CM 492] Capstone Experience***

The Construction Capstone Experience will integrate the coursework concepts of the core program in a research/application activity. The course is intended to develop a higher level of comprehensive understanding of the construction process and problem solving associated with the life cycle of a construction project. The course utilizes knowledge and concepts developed in earlier coursework to enhance the student's understanding of the interrelationships between the design process, estimates, schedules, and contracts. The course will simulate a construction project. The students will work in teams. Each team will be totally responsible for designing, developing, estimating, scheduling, contracting, and administering the works for the completion of a small commercial or light commercial project. The students will complete a major portion of the course requirement through the use of applicable construction software programs taught in the CM curriculum. The course will further develop and utilize oral and written communication skills, which have become a major factor in determining the success of the construction managers and executives.

***[CM 497] Independent Study in Construction Management***

Independent Study in Construction Management. Maybe repeated as the topic changes.

**Criminal Justice**

***[CJ 111] American Criminal Justice***

The importance of race, ethnicity, and gender in criminal justice processes. MnTC Goal 2.

***[CJ 190] Topics in Criminal Justice***

This is a lower division topical course which may be repeated when the topic changes.

***[CJ 200] Introduction to Criminal Justice***

Overview of the criminal justice field focusing on the history and description of the contemporary United States system. The overview will include both the adult and the juvenile justice system.

***[CJ 201] Introduction to Juvenile Justice***

This course provides an overview of historical and contemporary perspectives of juvenile justice within the United States. Specifically, this course examines: (1) the development of the U.S. juvenile justice system, (2) definitions and measurements of juvenile delinquency, (3) controversial juvenile justice practices and policies, and (4) the complex relationship between juvenile justice, race/ethnicity, gender, and socio-economic status.

### ***[CJ 290] Topics in Criminal Justice***

This is a lower division topical course which may be repeated when the topic changes.

### ***[CJ 300] Criminology***

This course will survey the history of crime in society, including theories, research and commentaries on crime and delinquency.

### ***[CJ 301] Delinquent Behavior***

Delinquent behavior and programs for its prevention, treatment and control. Same as SOC 301.

### ***[CJ 303] Punishment and Prisons***

This class traces the origins and development of incarceration as the principle response to crime in the U.S. It explores changing punishment practices, reasons offered to justify punishment, and the social organization of contemporary U.S. prisons

### ***[CJ 304] Community Corrections***

Sociological analysis of community corrections, emphasizing probation and parole.

### ***[CJ 306] Gangs***

This course examines historical and contemporary perspectives of gangs in the United States, and briefly explore international gang activity. MnTC Goal 5.

### ***[CJ 309] Law and Society***

Relationships of law and society; social forces in law making; dynamics of law administration; social, cultural and behavioral effects of law; history and development of the legal profession; analysis of legal language and reasoning. Prerequisite may be waived with the consent of the instructor. Same as SOC 309.

### ***[CJ 312] Criminal Investigation***

This course will cover a variety of topics that would assist law enforcement officers in conducting investigations.

### ***[CJ 313] Law Enforcement***

This course will examine the origin, history, and development of policing in the United States.

### ***[CJ 335] Criminal Law***

Substantive criminal law, development and meaning of principles of criminal law, current issues. Same as POL 335

### ***[CJ 337] Criminal Procedure***

The course will examine contemporary interpretations of the U.S. Constitution's protections for the criminally accused, which are primarily found in the 4th, 5th, 6th, 8th, and 14th Amendments.

***[CJ 380] Global Criminal Justice***

Research, commentary, and theory in international crime and social control. Particular attention is given to social inequities and human rights. MnTC Goal 8.

***[CJ 385] Crime, Justice, and Media***

An exploration of how justice ideals are represented in print, broadcast, and Internet Media. Special attention is given to ethical codes and dilemmas for officers of the court. MnTC Goal 9.

***[CJ 390] Topics in Criminal Justice***

This is an upper division course with varying topics from the discipline of criminal justice.

***[CJ 400] Seminar in Criminal Justice***

An in-depth analysis of a topic in criminal justice. Students may apply up to 8 credits to the degree.

***[CJ 430] Minnesota Criminal Law and Procedure***

The Minnesota criminal statutes as well as the Minnesota rules of criminal procedure are examined. Technical study of police report writing designed to meet the standards of the POST Board licensing examination will be covered.

***[CJ 469] Internship***

A supervised, practical experience in criminal justice. A maximum of 12 internship credits may be applied to the degree. Credits may not be applied to the criminal justice major.

***[CJ 490] Topics in Criminal Justice***

This is an upper division course with varying topics from the discipline of criminal justice.

***[CJ 497] Readings in Criminal Justice***

Selected readings in Criminal Justice under the close supervision of a member of the CJ program.

**Economics**

***[ECON 100] The American Economy***

A one semester course in principles of economics with special emphasis in developing critical thinking skills and understanding the unique economic experiences of different groups in the American Economy. This course is for non-business and non-economics majors. MnTC Goal 2.

***[ECON 202] Principles of Economics I: Micro***



An introductory study of the price system, resource allocation, and income distribution. MnTC Goal 5.

***[ECON 204] Principles of Economics II: Macro***

An introductory study of national income, fiscal and monetary theory and policy, unemployment and inflation. Prerequisite can be waived with consent of the instructor. MnTC Goal 5.

***[ECON 300] Global Economic Issues***

An introductory study of global economic issues focusing on the experience of Asia, Africa, or Latin America. Topics include the role and history of international economic institutions, the impact of trade on participating nations, views of writers from selected regions, economic development, demographic trends, foreign investment, and international distribution of income and wealth. This course will not fulfill the economics major requirements. MnTC Goal 8.

***[ECON 302] Intermediate Microeconomic Theory***

Theories of consumer and producer behavior under various market structures; theory of production and distribution; general equilibrium and welfare criteria.

***[ECON 304] Intermediate Macroeconomic Theory***

An examination of national income accounting, income determination, employment, growth theory and economic policy.

***[ECON 305] The Economics of Poverty, Discrimination, and Inequality***

An examination of poverty, discrimination, and income inequality among diverse populations in the United States. Topics include causes of poverty, economics of discrimination in terms of majority and minority groups, and historical perspective of ethnic minorities. MnTC Goal 7.

***[ECON 315] Government and Business***

A survey course which includes governmental enforcement of competition, regulation of public utilities, and public enterprise. Same as MGMT 315.

***[ECON 320] Money and Banking***

Roles of money, banking and the financial market place; monetary policy; relationship of monetary variables to general economic policy.

***[ECON 340] The Gendered Economy***

Explores how gender has influenced access to economic resources, opportunities, and institutions in the United States. Topics include a historical perspective on women's pursuit of economics citizenship; intersectional analysis of the role of race and class in that pursuit; and an introduction to feminist economics. MnTC Goal 9.

***[ECON 350] Public Finance***

Study of taxes and expenditures of federal, state, and local governments and their effects upon economic activity, fiscal policy and national debt.

***[ECON 370] Introduction to Econometrics***

Study of quantitative techniques employed in economics.

***[ECON 390] Topics in Economics***

Topics of current interest not covered elsewhere in the curriculum.

***[ECON 415] Industrial Organization and Public Policy***

Analysis of market structure, market conduct, and economic performance. It combines the latest theories with empirical evidence about the organization of firms and industries. Same as MGMT 415.

***[ECON 416] Labor Economics***

Wage and employment theory, labor unions and other institutions associated with collective bargaining, and social legislation. Same as MGMT 416.

***[ECON 425] International Trade and Finance***

Theories and institutions of trade and finance are examined in traditional and contemporary contexts.

***[ECON 469] Internship***

Supervised economic field work through placement in government, volunteer or commercial agencies. A maximum of 12 internship credits may be applied to the degree.

***[ECON 492] Economics Senior Seminar***

A capstone course requiring a research paper using tools of economic analysis, and a written and oral presentation.

***[ECON 494] Undergraduate Research in Economics***

Individual inquiry in economics resulting in a research paper. May be repeated for credit.

***[ECON 497] Independent Study***

Individual inquiry in economics. May be repeated for credit.

**Education**

***[ED 205] Introduction to Education***

This course explores education in America from early childhood through high school graduation. This course will introduce the philosophical foundations, learning environments, social contexts, curriculum and instruction, standards and assessment, as well as contemporary issues related to the field. The roles, responsibilities and daily life of teachers, schools and students will be examined. This course includes 40 hours of experience in the field.

***[ED 294] Educational Psychology***

Explains psychological theory and research related to learning, motivation, cooperation, and instruction in diverse cultures and settings.

***[ED 310] Social Foundations of Education***

Historical, social, and multicultural foundations of education will be studied. Social and ethical issues will be examined with consideration of implications for teaching in order to better understand education within a context of a changing society. A variety of interactive methods will be employed. Students in all teaching licensure programs will enroll in ED 310.

***[ED 367] Practicum: General Education***

Field experience in general education classrooms- elementary level and secondary level.

***[ED 448] Reading Study Skills in the Content Areas***

Teaching techniques to improve reading ability in content materials; vocabulary, comprehension, study skills and providing for individual learning differences. Includes child development, assessment, cultural diversity issues, and technology.

***[ED 451] Middle School Philosophy***

This course is intended for those individuals preparing to become middle level school leaders and educators. It investigates the philosophical basis for middle level education and all phases of duties and responsibilities for educational leadership as they interact with the components of appropriate middle level education.

***[ED 452] Adolescent Development and Advisor/Advisee Programs***

The purpose of the course is to explore pre-adolescent development and the role adults play in the unique development of middle school students to build positive relationships through a team using planned advisory programs.

***[ED 453] Interdisciplinary Instructional Strategies***

The purpose of the course is to provide instruction in the design and preparation of interdisciplinary instructional units with appropriate instructional strategies for classroom use. The instructional units and strategies will be designed for use in grades 5-8 middle school classrooms using an interdisciplinary team approach to instruction.

***[ED 460M] Student Teaching: Middle School***

Supervised student teaching experience in a middle school (grades 7-8). Applications are due per posted Field Experience deadlines

***[ED 460S] Student Teaching: Secondary***

Supervised student teaching experience in a secondary school (7-12). Applications due as per posted deadlines in Field Experiences Offices.

***[ED 461S] Student Teaching: Secondary***

Supervised student teaching experience in a secondary school (7-12). Applications due as per posted deadlines in Field Experiences Offices.

***[ED 461V] Student Teaching: Secondary/K-12***

Supervised student teaching in a middle school or a secondary school (9-12). Applications due per posted deadlines in Field Experiences Office. Students must have completed the education core and all major coursework.

***[ED 469] Internship***

Opportunities for on-the-job experience. Appropriate for students with individualized majors. A maximum of 12 internship credits may be applied to the degree.

***[ED 490] Topics in Education***

This is an upper division topical course which may be repeated when the topic changes.

***[ED 497] Independent Study in Education***

Extends study beyond regular course work. May substitute for courses in major with consent of advisor, instructor, and department chairperson. Repeated up to 8 credits.

***[ED 498] The Professional Teacher in the Classroom***

The purpose of this course and 60-hour practicum is to prepare for a successful student teaching experience. More specifically, to accomplish the following. To engage in a meaningful field experience and to process that experience through reflection, analysis, discussion, and writing. To plan, prepare, teach and assess a unit consistent with the edTPA requirements. To deepen one's understanding of the role of a teacher, the types of duties and commitment that classroom teaching entails by leading a focus class all semester. To increase one's awareness and ability to respond to the social, emotional, physical, and psychological needs of students with support from the cooperating teacher, school liaison, and ED 498 instructor. To contribute to a positive learning environment, by encouraging appropriate social interactions and engagement in the learning process. To develop professional consultation skills necessary to initiate and apply appropriate and effective teaming techniques across school and home environments.

**Elementary and Early Childhood Education**

***[EECE 190] Topics in Elementary and Early Childhood Education***

This is a topics course and may be repeated as topics vary.

***[EECE 220] Foundations of Early Childhood & Early Childhood Special Education***

This is an introductory course to the field of the early childhood and early childhood special education. Basic aspects of programming for children from birth to age eight will be studied. Referral and intervention procedures are included as well as various educational and service delivery models. Terminology, key professionals, historical and contemporary issues are included.

***[EECE 250] Creative Expressions in Early Childhood***

This course will explore play-based art and music experiences that are integrated throughout the curriculum. Focus will be placed on understanding creativity and the development of skills to assist and encourage young children to express themselves through art, music, movement, and drama during one-on-one, choice time, and large-group experience.

***[EECE 290] Topics in Elementary and Early Childhood Education***

This is a topics course and may be repeated as topics vary.

***[EECE 297] Independent Study in Education***

Extends study beyond regular course work at the sophomore level.

***[EECE 333] Discovery Learning***

Developmentally appropriate practices focusing on methods and materials in art, literature, music, math, science, and social/multicultural studies. Emphasis: focusing on constructivist approaches to hands-on discovery learning of children ages three to eight.

***[EECE 397] Independent Study in Education***

Extends study beyond regular course work at junior level.

***[EECE 426] Primary Methods: Math, Science, Social Studies***

A methodology course for early childhood majors to explore constructivist approaches to hands-on discovery learning of math, science, and social studies in the primary grades of 1-3.

***[EECE 430] Infant/Toddler Programs and Practices***

An orientation to planning and implementing programs for children ages birth to three years and their families. Guidelines for supporting development and for providing quality care and education will be examined and applied in a field experience in an infant or toddler program.

***[EECE 433] Preschool and Kindergarten Curriculum***

This course will provide the student with the skills and knowledge necessary to plan and implement curriculum in programs serving pre-school and kindergarten children and their families. Students apply integrated

curriculum planning and demonstrate advanced use of developmentally appropriate practices and strategies in either a pre-school or a kindergarten classroom. The practicum, EECE 467K (one credit) accompanies this course and must be taken concurrently.

***[EECE 437] Leadership and Administration in Early Childhood Education***

This course focuses on the knowledge, skills, and dispositions necessary to develop leadership and administrative abilities needed in the field of Early Childhood Education. This course will address a variety of facets of administration including enrollment, staffing, supervision, policy development, communication, budgeting and evaluation of early childhood programs. In addition, this course includes the examination of leadership, advocacy, and contemporary issues within the field, culminating in the writing and presentation of an independent scholarly advocacy paper. As a writing intensive course, writing is a major component of the course.

***[EECE 438] Guidance and Play***

This course explores guidance and play with young children. Emphasis on using relationship-based guidance approaches to support the development of self-regulation and positive self-concept. Methods for designing a learning environment and using play to optimize children's learning will be taught. Guidance strategies and group management approaches are addressed.

***[EECE 441] Children's Literature: Content and Methods***

Close reading and study of children's literature--folktales, myth, hero tales, picture books, poetry, modern fantasy, biographies and realism. Emphasis on the nature of children's literature, literature from diverse cultures, criteria for selection, and strategies for reading/teaching literature as a content field in the elementary school. This course meets the upper-level writing requirement.

***[EECE 469] Early Childhood Internship***

This internship will provide students with the opportunity to apply and demonstrate the knowledge, skills, and dispositions required in the field of early childhood education. Students will work with groups of children in an early childhood setting for up to 12 weeks. Students will complete experiences typical in an early childhood setting, overseen by a faculty supervisor and a site-based early childhood professional.

***[EECE 480E] Student Teaching: Elementary***

Supervised student teaching experience at the elementary level for students receiving a K-12 license only. Enrollment in ED 460S (5 credits) is also required.

***[EECE 481C] Student Teaching: Early Childhood***

Supervised student teaching experience in an elementary school and in an early childhood program. Students will teach at two levels, preschool through third grade.

***[EECE 481E] Student Teaching: Kindergarten/Elementary***

Supervised teaching experience in a kindergarten and/or elementary setting. Retention in Teacher Education Program through SARTE. Satisfactory completion of/or co-enrollment in all prior Early Childhood Education program requirements.

***[EECE 481V] Student Teaching: Elementary/Early Childhood***

Supervised student teaching experience in an elementary school or early education center. Only students who are student teaching in the Student Teaching Abroad Program, or being hosted by MSUM via the Common Market Program, or other approved exchange program, should register for this course.

***[EECE 490] Topics in Elementary and Early Childhood Education***

This is a topics course and may be repeated as topics vary.

**Engineering**

***[ENG 469] Internship***

Internship course for the Engineering Physics Degree.

**English**

***[ENGL 099] Fundamentals of Writing***

ENGL 099 is an introductory composition course designed to prepare students for the 1A, Written Communication course. Students will study grammar, standard English usage, and rhetorical techniques and strategies. This course emphasizes sentence structure, paragraph development, and organizing and developing the short essay. There is also a strong focus upon reading and analysis of expository essays and other short, mostly non-fiction, works. Students placed into ENGL 099 must attain a passing grade in the course before enrolling in the required 1A, Written Communication course. ENGL 099 carries only credit toward semester load.

***[ENGL 101] English Composition I***

English Composition I is the foundational writing course; special attention is devoted to learning about and using effective writing processes to create logical, engaging, and grammatically and mechanically correct essays suitable for a variety of audiences and purposes. In addition, students will read, analyze, evaluate, synthesize, and integrate appropriately and ethically information and ideas from diverse sources and points of view in their writing. MnTC Goal 1.

***[ENGL 183] Introduction to the American Short Story***

This course introduces students to the American Short Story from the 19th Century to the present. In this course students will have the opportunity to cultivate an appreciation for American literature, and develop the skills of close reading and analysis of selected works. MnTC Goal 6.

***[ENGL 190] Topics in English***

This is a topical course and may be repeated when the topic changes.

***[ENGL 201] English Composition II***

This course focuses on analysis and argumentation, with special attention devoted to learning about and producing effective and persuasive academic essays. Many assignments in this course will involve research and thus will require ethical and correct source citation and documentation. Must have successfully completed ENGL 101 or an acceptable placement score. MnTC Goal 6.

***[ENGL 202] English Composition and Literature***

The First-Year Composition and Literature course stresses expository writing (essays that explain, describe, compare, interpret, analyze, and persuade). In this course students will be asked to read and write with thoughtfulness, skill, and honesty, to think critically, to develop and defend their assertions, and to make use of library and other research sources that require crediting the writing of others in a responsible manner. Students will also read numerous works of poetry and drama and other genres. MnTC Goal 6.

***[ENGL 215] World Games: International Stories about Sports and Politics***

This class uses a variety of literary and cinematic texts to explore how organized sports have been used to help build a national identity, to represent nations in the international sphere, and to express conflicts within and between nations. MnTC Goal 6 and 8.

***[ENGL 234] Mythology***

Introduction to the great myths of Greece and Rome and their influence upon later literature. MnTC Goal 6.

***[ENGL 246] Women in Literature***

A study of the various ways women are depicted in imaginative literature and expository prose. Readings vary. MnTC Goal 6.

***[ENGL 280] World Literature: East and West***

Selected writers or literary traditions in world literature with at least one-half of the course focusing on the non-western literature. MnTC Goal 7.

***[ENGL 282] Literature for Non-Majors***

This course is designed to introduce students to significant English, American, and World literatures from a variety of periods, cultures, and literary or critical traditions. The course will introduce students to the process of situating works within larger cultural, historical, and/or biographical contexts. Students will also receive instruction in the process of critical and interpretive reading and writing. MnTC Goal 6.

***[ENGL 285] Scriptwriting***

An introductory workshop in writing scripts for the stage and the screen. Students will be expected to write a short play and a mini-screenplay of 15-20 pages. Scripts will be work-shopped in class.

***[ENGL 286] Writing for the Workplace***



Study and practice in writing non-academic material linked to the experiences of daily life and to practical career situations.

***[ENGL 288] Introduction to Creative Writing***

Practice in the writing of poetry, short fiction, or drama.

***[ENGL 290] Topics in English***

Study of a particular literary topic: special approaches or procedures related to the study of language or literature. The course may be repeated when the topic changes.

***[ENGL 300] Introduction to Literary Studies***

This course introduces students to the basic elements of literary study, including literary analysis, critical interpretation, and theoretical approaches. Students will study a variety of genres and styles from diverse cultural and historical perspectives. Students will also read exemplary pieces of criticism designed to demonstrate the fundamental tenets of a critical approach. Required of all English majors as a prerequisite for all core and major courses.

***[ENGL 301] Medieval British Literature***

Study of selected major authors and works, sometimes in comparison with European counterparts, exclusive of Chaucer.

***[ENGL 311] Major British Writers I***

Selected major writers through Milton. Some attention to literary criticism and research techniques.

***[ENGL 312] Major British Writers II***

Selected major writers, Enlightenment through Romantics, Victorians and Moderns. Some attention to literary criticism and research techniques.

***[ENGL 314] Shakespeare***

The course emphasizes the skills of close reading as well as understanding Shakespeare's texts within the context of early modern history and culture. In addition to reading a variety of Shakespeare's comedies, tragedies, and romances, students will study videotaped performances of select passages and scenes in order to analyze and discuss the many different and differing ways the plays can and have been recreated. Students may repeat the course as the covered play texts change.

***[ENGL 314T] Shakespeare: Theory***

An examination of Shakespeare's plays from a number of critical perspectives, including New Criticism, New Historicism, Post-colonialism, Queer Theory, Feminism, and others. Students should be simultaneously enrolled in English 314.

***[ENGL 316] Hebrew Bible as Literature***

As an introductory survey of the Hebrew Bible in English, the course will introduce students to the academic study of the Torah, the Prophets, and the Writings as literature. As a writing intensive course, students will research, write, and revise a number of critical/interpretive papers, which foregrounds both writing as a process and writing to learn. MnTC Goal 6.

***[ENGL 317] Personal Lives, National Affairs***

This course will examine a variety of texts that show the intersection of personal lives and national affairs within a range of different cultural and global settings. MnTC Goal 6 and 8.

***[ENGL 318] Christian Bible as Literature***

An introduction to the academic study of the Christian bible as literature, including the gospels, the letters of Paul, and Revelations. Focus on relevant historical, theological, and cultural contexts in the literary study of the texts. MnTC Goal 6.

***[ENGL 321] Early American Literature***

Early-American Literature. Study of authors, genres, or literary movements from the beginnings-1830. Subjects and focus will vary as materials address literature from the moment of Anglo-European-Indigenous contact to the constituting of the New Republic.

***[ENGL 322] 19th-Century American Literature***

Studies of authors, genres, or literary movements in nineteenth-century America. Subjects and focus will vary as materials address the literature of nineteenth-century America.

***[ENGL 323] 20th-21st Century American Literature***

Study of authors, genres, or literary movements from 1900-present.

***[ENGL 325] Literature for Young Readers***

Literature for Young Readers is a concentrated reading course designed to impart the knowledge necessary for an appreciation and understanding of children's literature, its historical development, major genres in the field, contemporary issues and debates about children and literature written for them, and the literary terms relevant to the study of literature written for children. In addition to reading classics and the critically acclaimed works of both fiction and nonfiction by modern writers, students will study poetry, folklore, mythology, and examine the relationship between illustration and text (picture books and graphic novels). MnTC Goal 6.

***[ENGL 330] Individual Authors***

Intensive study of one or two significant authors.

***[ENGL 332] Film and the Novel***

Comparative analysis of major novels and their screen adaptations. Focus on aesthetic and interpretative similarities and differences.

***[ENGL 335] World Mythology***

Students will explore mythological systems from around the world focusing upon the historical "interdependence of nations and peoples" and developing the "ability to apply a comparative perspective to the cross-cultural social, economic and political experiences" embodied and explored by these mythologies. MnTC Goal 8.

***[ENGL 340] Genre Studies***

Extensive reading in a particular literary genre--short story, novel, poetry, drama, or epic.

***[ENGL 343] Drama II***

Representative readings in dramatic literature from Greek theatre to the present day. Greek and Roman tragic and comic playwrights, Aristotelian criticism, and classical theatre history. Early native farce, religious drama, and the drama and theatrical innovations of the Renaissance through the 18th century. Same as THTR 322.

***[ENGL 346] Virtue and Vice in Gothic Storytelling***

A consideration of the ethical implications of the literary constructions of Gothic storytelling and the larger social context that surround it and its place in popular culture. Students will analyze Gothic tales in order to extract their ethical underpinnings. Students will also use their readings to better understand larger ethical belief systems and their place within those. MnTC Goal 9.

***[ENGL 352] Native American Literature***

This course is an introduction to and an exploration of literature written by Native Americans. Texts read in this course are produced by writers of Native American descent. Course presents core texts (fiction, essays, poetry, drama) in the development of literary history of western Indian writers with an emphasis on contemporary literature. MnTC Goal 7.

***[ENGL 354] Non Fiction Writing***

Writing of non-fiction prose; partly a dialogue on the form and theory of non-fiction, but mainly a workshop centered on the practice of non-fiction writing.

***[ENGL 356] African American Literature***

The focus of the course is the African-American literary tradition. This survey course covers African-American writing from slave narratives to the present. Because of the historical sweep of the course, students will read broadly, rather than intensively--with any one writer. Students will also be instructed in the historical background for the writings.

***[ENGL 357] New Media and the CA/L Classroom***

This hands-on course explores a variety of educational programs that will teach pre-service CA/L teachers how to design and deliver lessons using technology, monitor student work using current computer programs, and interact with students in real time using digital devices. The course also teaches media literacy: evaluating and understanding the complex messages delivered via television, radio, Internet, newspapers, magazines, books, billboards, video games, music, and other forms of media.

***[ENGL 365] Language and Learning***

An interdisciplinary approach to theories of language development, and language as a mode of learning.

***[ENGL 371] Survey of American Literature I***

Historical and critical study of authors, genres, and literary movements from early American writings through American Romanticism. Authors may include William Bradford, John Winthrop, Anne Bradstreet, Benjamin Franklin, Phillis Wheatley, Washington Irving, James Fenimore Cooper, Ralph Waldo Emerson, Margaret Fuller, Nathaniel Hawthorne, Henry David Thoreau, Herman Melville, Edgar Allan Poe, Frederick Douglass, Harriet Beecher Stowe, Walt Whitman, and Emily Dickinson.

***[ENGL 372] Survey of American Literature II***

Historical and critical study of authors, genres, and literary movements from 19th Century American Realism, Naturalism, Modernism, Post-Modernism to the present. Authors may include Henry James, Kate Chopin, Theodore Dreiser, Edith Wharton, Robert Frost, T.S. Eliot, William Carlos Williams, Wallace Stevens, Willa Cather, Ernest Hemingway, F. Scott Fitzgerald, William Faulkner, W.E.B. DuBois, Langston Hughes, Zora Neale Hurston, Ralph Ellison, Audust Wilson, Toni Morrison, Maxine Hong Kingston, and Louise Erdrich.

***[ENGL 374] Theory & Methods: Writing Grades 5-12***

Principles of clear and effective writing, elements of the writing process, research and methods in teaching, responding to, and evaluating writing.

***[ENGL 380] World Literature***

Study of selected world masterpieces grouped by theme or genre. MnTC Goal 8.

***[ENGL 381] World Religion and Literature***

An introduction to the academic study of sacred scriptures and contemporary fiction from Hindu, Buddhist, Jewish, Christian, and Islamic traditions. Readings include selections from world scriptures paired with contemporary fiction. Focus on relevant historical, theological, and cultural contexts in the literary study of the texts. MnTC Goals 6 and 8.

***[ENGL 387] Technical Report Writing***

Expository writing dealing with subjects in student's major and planned for a specialized audience: documenting, writing abstracts, preparing reports of original investigations. Recommended for students who have taken classes in their major.

***[ENGL 388] Creative Writing***

The writing of poetry, short fiction, non-fiction, plays, or film. Partly a dialogue on contemporary writing, but mainly workshop. May be repeated up to three times for credit if the genre changes.

***[ENGL 390] Topics in English***

Study of a particular literary genre, topic, or theme.

***[ENGL 395] Theory and Methods of Tutoring***

Presentation and discussion of theories and methods for conference teaching and the writing process. Writing and responding to writing to facilitate thinking about the course content. Observing and conducting tutorial sessions to gain hands-on experience in tutoring/teaching. This course is a prerequisite for students who wish to work as tutors in The Write Site. It's a relevant course for any prospective secondary English teachers.

***[ENGL 402] Introduction to Publishing***

This course familiarizes students with small press publishing and with the various facets of the writing, publication and marketing processes. It also includes an orientation to New Rivers Press, a working non-profit press located at MSUM, and a daylong field trip to various publishing facilities in the Minneapolis-St. Paul area.

***[ENGL 407] Big City, Big Impact***

This course uses a variety of texts for an exploration of the environmental and social impacts of big city life, as shown by various writers. MnTC Goal 6 and 10.

***[ENGL 410] Studies in British Literature***

Study of selected topics, movements, or genres.

***[ENGL 413] Writing About Art***

This course features writing about art, the visual arts particularly. It is a writing intensive course where we build and refine skills in writing about art, and we write about art to inform, persuade, clarify and account for our responses to works of art. All formal writing assignments written in response to gallery visits in the F/M area will pass through an in-class edit for the purposes of developing plans for revision of the writing.

***[ENGL 417] Issues of Death & Grief: Creative Non-Fiction of Life & Loss***

Within the gravities of life and death, love and grief, there is a search for understanding and healing. This course is designed to help students understand that death and grief present choices and changes that face us as citizens within a community of loved ones. During this course, students will consider the importance of care and customs surrounding death and dying and the value of honest dialogue when grief is set upon individuals struggling with loss. This course will develop students' awareness of the ethical dimensions of personal decisions (for self and others in the realm of loss, the business of mourning and the pain of grief) and to cultivate their deliberative skills through respectful engagement with others whose views differ. MnTC Goal 9.

***[ENGL 423] Writing for Children***

This course is a writing intensive course that focuses on writing for children and adolescents. Students will read several texts written for young readers and analyze the craft of writing in each. Students will also complete practice writing exercises that are specific to the conventions of genres in children's literature, workshop and revise major writing assignments, and produce a final polished project of a collection of poetry, a first chapter in fiction, or a short story.

### ***[ENGL 425] Grant Proposal Writing***

Students research significant problems or opportunities in their major fields and research applicable sources of private and/or public funding. In response to the problems or opportunities they select, students will research, design, and write grant proposals for cost-effective programs, including program-evaluation plans. ENGL 387 - Technical Report Writing is strongly recommended before you take this class.

### ***[ENGL 435] Nature Writing/Ecocriticism***

Ecocriticism is a fairly recent cultural and literary development, the term coined in the late 1970s. This course introduces students to representative ecocritical texts that study the relationship between humans and the environment. Significant attention will be devoted to issues of sustainability, eco-literacy, and the efficacy of literary expressions of environmental value. MnTC Goal 10.

### ***[ENGL 445] Holocaust Literature***

In this course, students examine a variety of literary works, including novels, diaries, memoirs, articles, essays, poems, short stories, historical documents, and/or films that illustrate prominent attitudes, historic events, and lived experience associated with the planned extermination of millions of people (including but not limited to Jews, Gypsies, Homosexuals, and Christians) during Hitler's reign. Through the study of these literary works, students come to recognize the consequences of stereotypes, prejudice, hate, and discrimination. As the class evaluates historic and current attitudes regarding the "other", students reflect upon their own ethical and moral views, identify personal responsibilities of citizenship, understand human rights as well as personal and societal obligations, examine the role of justice, and analyze the ethical dimensions of political, social, and scientific issues. MnTC Goals 6 and 9.

### ***[ENGL 452] Craft Seminar***

A class based primarily on discussion of how authors use various strategies to achieve narrative, poetic, or dramatic success. An intensive examination of the craft of fiction, nonfiction, poetry, or script writing. Conducted as a reading seminar, not as a writing course. Students will make an oral presentation on some element of craft exhibited by a chosen work. Successful completion of ENGL 288 and 388, and at least junior status are recommended. Course may be repeated as genres change.

### ***[ENGL 457] Literary Editing: Red Weather***

This is a production-centered, hands-on class. Students will be responsible for producing a complete issue of Red Weather, MSUM's literary magazine, from screening and selecting manuscripts, interacting with the authors whose work is chosen, to designing and promoting the finished magazine.

### ***[ENGL 462] Practicum in Publishing***

This course is designed to familiarize students to the working functions of a small press literary publishing house through lectures, demonstrations, and supervised group activities such as participating on editorial book teams, writing teacher guides for the website for New Rivers Press books, developing marketing plans, reading tours, distributor marketing packets etc. All projects are presented in class to foster a broader class understanding of the overall activities of a small press.

***[ENGL 463] History of the English Language***

A survey of the early history of the English language, its sounds and its grammar, emphasizing Old English and its literature or Middle English and its literature.

***[ENGL 469] Internship***

Supervised employment requiring substantial writing practice in government or private agency. Repeatable up to a total of 12 credits. All credits apply toward graduation, but only three may count toward a major or writing minor in English. Six credits accepted toward the B.A., Writing Emphasis.

***[ENGL 484] Theory & Methods: CA/L Grades 5-8***

Review of current trends in communication arts/literature education in middle school and junior high (grades 5-8). The course teaches approaches and techniques for teaching and assessing literacy and examining adolescent/young adult literature and media.

***[ENGL 486] Tutorial***

The consideration of various problems in literature or language agreed upon by the instructor and the student.

***[ENGL 487] Advanced Technical Report Writing***

Process-oriented writing class that emphasizes theoretical aspects of audience analysis, principles of document organization and design, and technical editing. Students will also learn how to design effective document supplements and visuals. Students will also learn about and use various research techniques. Course is conducted through lectures, group and individual discussions, collaborative writing, and hands-on work in the library and computer labs. ENGL 487 culminates in a professional website and an online portfolio.

***[ENGL 488] Advanced Creative Writing***

Advanced work in writing of poetry, short fiction, non-fiction, plays or film offered once a year in Spring as a Capstone course choice for Writing Majors. Students may repeat course once when genre changes.

***[ENGL 490] Topics in English***

This is an upper division topical course and may be repeated when the topic changes.

***[ENGL 491] Theory & Methods: CA/L Grades 9-12***

Current practices and trends in teaching and assessing communication arts/literature in grades 9-12.

***[ENGL 492] Literature Capstone Seminar***

Study of selected topics, individual authors, genres or movements in American, British or World literature. Required for BA literature majors and open to BA Writing majors and BS English majors. The course is offered once per semester. It includes multiple approaches to analyzing literature and a documented research paper of substantial length with an extensive annotated bibliography. The capstone serves as a culminating course for academic study in English. Students are encouraged to take the capstone in their senior year.

### ***[ENGL 493] Grammars of English***

A survey of the history of language study, of the history of the English language, and of the various kinds of grammars: traditional, structural, and transformational.

### ***[ENGL 497] Independent Study in English***

The consideration of various problems in literature or language agreed upon by the instructor and the student.

## **English Language Program**

### ***[ELP 093] Reading I***

This course provides focused instruction and practice in the skill of reading. Students will work with texts at an appropriate level for their proficiency in English. Students will learn basic characteristics that distinguish textual genres. Students will learn to approach texts with purpose and with a process to assist them. Students will learn to comprehend texts at the literal and reorganization levels on Barrett's scale of comprehension by applying knowledge and skills developed in other ELP courses. Placement test and instructor permission.

### ***[ELP 094] Introduction to Writing Conventions***

This course is the foundational course in writing in the English Language Program. The course is dedicated to learning about and understanding the basic structures and formats of the English writing system. Students will apply what they have learned in ELP 095 and ELP 096 about syntax, sentence structure, and vocabulary to the skill of writing. In addition, they will learn the basic mechanics of written English. Placement test and instructor permission.

### ***[ELP 095] Basic English Syntax***

This course introduces basic syntax features of English and provides practice with them in all four skill areas. Priority is placed on oral skill development, but the use of syntax in written skills will also be covered. Placement test and instructor permission.

### ***[ELP 096] Conversational Vocabulary***

This course provides focused attention and practice on the most frequent words of English. Students will learn the pronunciation, spelling, and meanings of the words so that they may comprehend them and produce them with ease. Students will also become familiar with common spelling patterns of English and some of the most frequent prefixes and suffixes. Students will learn to relate words to each other to create a semantic web of English. Placement test and instructor permission.

### ***[ELP 101] Pronunciation Lab I***



Pronunciation Lab I provides focused and individualized assistance in the pronunciation of English. Students develop their abilities to hear and produce the sounds of English in isolation and in combination within words and sentences. Instruction may take place in the Speech, Language, and Hearing Sciences lab spaces or in other spaces on campus and are arranged on an individual or small group basis. Placement test and instructor permission required.

### ***[ELP 102] Conversation I***

Conversation I combines the skills of listening and speaking in one course for students at a beginning level of English. Students develop the interpersonal communication skills necessary to interact with others in a variety of settings. In addition to learning to conduct social interactions with peers, students will learn to conduct transactions with strangers, and interact appropriately with professors and supervisors. Placement test and instructor permission required.

### ***[ELP 103] Reading II***

This course continues to provide focused instruction and practice in the skill of reading that was begun in ELP 093. Students continue to work with texts at an appropriate level for their proficiency in English. Students will learn more characteristics that distinguish textual genres. Students will learn to approach texts with purpose and with a process to assist them. Students will comprehend texts at the literal and reorganization levels on Barrett's scale of comprehension by applying knowledge and skills developed in other ELP courses. Students will begin to make inferences based on information presented in a text. B or higher in ELP 093 and instructor permission OR placement test and instructor permission required.

### ***[ELP 104] English Writing I***

This course introduces students to the concepts behind the composition process as well as the process itself. The course focuses on the development of effective paragraphs and students' abilities to create topic, supporting, and concluding sentences by using a process of idea generation, drafting, revision, and editing. Students will continue to develop fluency by journaling and will learn to place the focus on accuracy in the editing stage of writing. B or higher in ELP 094 and instructor permission OR placement test and instructor permission required.

### ***[ELP 105] Intermediate English Syntax I***

This course moves from basic syntax features of English to complex syntactic patterns and provides practice with them in all four skill areas. In addition, more difficult aspects of verb forms and other categories will be addressed. Priority is placed on oral skill development, but the use of syntax in written skills will also be covered. B or higher in ELP 095 and instructor permission OR placement test and instructor permission required.

### ***[ELP 106] Foundational Vocabulary***

This course builds a student's vocabulary beyond the most frequent words of English. Students continue to expand their vocabularies by adding more words, learning their pronunciations, spellings, and syntactic categories. Students continue to learn more derivational prefixes and suffixes and develop skill in using the morphology of English to guess the meanings of unfamiliar words. Students continue to learn the ways words relate to each other and learn to use these relationships to guess more unfamiliar words in context. Students

begin to use English-English dictionaries. B or higher in ELP 096 and instructor permission OR placement test and instructor permission.

### ***[ELP 107] Orientation to Campus & Community***

This course helps new arrivals to the ELP program learn about the MSUM campus and community as well as the Fargo-Moorhead community. It is an extension of the initial orientation sessions provided before the beginning of the semester. Students will read a variety of sources of information, such as the MSUM bulletin, MAT bus schedules, and Internet sites. They will also interview faculty, staff, and students and listen to guest speakers to learn about the campus and community.

### ***[ELP 201] Pronunciation Lab II***

Pronunciation Lab II continues focused and individualized assistance in the pronunciation of English. Students further develop their abilities to hear and produce the sounds of English in isolation and in combination within words and sentences. Instruction may take place in the Speech, Language, and Hearing Sciences lab spaces or in other spaces on campus and are arranged on an individual or small group basis. This course focuses on helping students improve the comprehensibility of their oral language production. Because an accent in spoken language is one of the most persistent features for language learners, students should not expect to “sound like an American” at the completion of the course, but rather they will learn how to reduce the influence of accent so that they are able to communicate more effectively in English with both native speakers and other non-native speakers. B or higher in ELP 101 and instructor permission OR placement test and instructor permission required.

### ***[ELP 202] Conversation II***

Conversation II expands on students’ existing skills of listening and speaking together in one course. Students develop the interpersonal communication skills necessary to interact with others in a wider range of settings and over a wider range of topics than those covered in ELP 102. In addition to conducting more extensive social interactions with peers, students will learn to conduct more extensive transactions with strangers and interact appropriately with professors and supervisors. B or higher in ELP 102 and instructor permission OR placement test and instructor permission required.

### ***[ELP 203] Reading III***

This course continues to provide focused instruction and practice in the skill of reading. Students continue to work with texts at an appropriate level for their proficiency in English. Students will learn more characteristics that distinguish textual genres. Students will approach texts with purpose and with strategies to assist them with all stages of the reading process. Students will comprehend texts at the literal, reorganization, and inference levels on Barrett’s scale of comprehension by applying knowledge and skills developed in other ELP courses. Students make inferences about texts and begin to think critically about the information in them. B or higher in ELP 103 and instructor permission OR placement test and instructor permission required.

### ***[ELP 204] English Writing II***

This course moves students away from the conventions for writing by hand and into the conventions for writing with technology. They also develop greater depth in their understanding of paragraph structure and how it can be effectively put to use to create personal essays and longer papers. They continue to develop

fluency in writing while further developing their accuracy with written forms. B or higher in ELP 104 and instructor permission OR placement test and instructor permission required.

### ***[ELP 205] Intermediate English Syntax II***

This course further develops student knowledge and understanding of syntax features of English. Students will encounter complex syntactic patterns and practice them in all four skill areas with particular emphasis on comprehending the meanings of these forms in written texts. In addition, more difficult aspects of verb forms and other categories will be addressed. B or higher in ELP 105 and instructor permission OR placement test and instructor permission required.

### ***[ELP 206] General Academic Vocabulary***

This course moves students' vocabulary from the frequency word lists to the general service academic word lists. Students will continue to focus on the pronunciation, spelling, and meanings of words across all language skill areas. Students will also continue to develop strategies for guessing the meanings of unfamiliar words from context and for looking up the meanings, spellings, and pronunciations of words in a dictionary. Students will begin to look at nonliteral usages of words, such as idiomatic expressions, similes, and metaphors. Students will begin to consider the origins of words. B or higher in ELP 106 and instructor permission OR placement test and instructor permission required.

### ***[ELP 207] Introduction to America***

This course provides students in the program with an overview of major aspects of U.S. geography, history, and culture. B or higher in ELP 107 and instructor permission OR placement test and instructor permission required.

### ***[ELP 301] Pronunciation Lab III***

Pronunciation Lab III continues focused and individualized assistance in the pronunciation of English. Students further develop their abilities to hear and produce the sounds of English in isolation and in combination within words and sentences. Instruction may take place in the Speech, Language, and Hearing Sciences lab spaces or in other spaces on campus and are arranged on an individual or small group basis. B or higher in ELP 201 OR Placement test and instructor permission required. This course focuses on helping students improve the comprehensibility of their oral language production. Because an accent in spoken language is one of the most persistent features for language learners, students should not expect to "sound like an American" at the completion of the course, but rather they will learn how to reduce the influence of accent so that they are able to communicate more effectively in English with both native speakers and other non-native speakers. B or higher in ELP 201 and instructor permission or placement test and instructor permission required.

### ***[ELP 302] Discussions and Debates***

This course moves students from using their oral language skills for personal interactions to using them for professional interactions. Students learn how business meetings in a variety of work settings differ from conversations and how language choices alter as well. Students learn some of the formal mechanisms of conducting a meeting and some of the formal mechanisms of debate, such as argumentation and rebuttal. B or higher in ELP 202 and instructor permission OR placement test and instructor permission required.

### ***[ELP 307] Contemporary America and World Events***

This course focuses on aspects of modern U.S. life within the larger context of world events. Students will access various news sources in English to follow issues of the day. They will access sources in print and in audio-visual formats. They will engage in discussions regarding the information and their reactions to the information. B or higher in ELP 207 and instructor permission OR placement test and instructor permission required.

## **Entrepreneurship**

### ***[ENTR 229] Introduction to Entrepreneurship***

Students will evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship.

### ***[ENTR 230] Entrepreneurial Finance***

This course is intended for students who wish to enhance their skills and knowledge in those areas of business that lead to successful entrepreneurship and small business management. The focus will be on those financial issues and decisions of particular concern to sole proprietors, partnerships, family-owned business and small early-stage corporations. This will include the financial aspects of the relationship between the firm and its owners.

### ***[ENTR 231] Entrepreneurial Leadership and Organization***

This course will define and develop leadership essentials for entrepreneurs and identify the best practices for building and managing an effective team for an entrepreneurial venture. In the process of completing this course, you will learn first and foremost about yourself as an entrepreneurial leader. We will then study practical actions for bringing others onto your team and how to inspire and energize the entire team to accomplish your vision/mission. We will study real world leaders, their mistakes and successes, and the best practices found in successful organizations in the 21st century.

### ***[ENTR 232] Entrepreneurial Marketing***

This course provides an opportunity to develop conceptual knowledge of important entrepreneurial concepts. The focus will be on the processes involved in marketing of goods and services, including the marketing terminology, the marketing mix, consumerism, and marketing segmentation. The concept of market and marketing research and the impacts of competitive structures on marketing decision-making will be covered.

### ***[ENTR 233] Case Studies in Social Innovation***

This course introduces students to the strategies and processes of social innovation and social change. Students will examine social innovation through case studies, best practice analyses, and relevant readings.

### ***[ENTR 309] Building a Workable Business Plan***

This course provides an opportunity for the students to write a workable business plan. Students will learn the typical process of starting a new venture. The course will focus on how to turn an idea to an opportunity, and eventually to a business. Major points will include how to create, shape, recognize and seize a business opportunity, as well as the specifics of writing a business plan.

## **Entertainment Industries Technology**

### ***[EIT 160] Introduction to the Entertainment Industry***

An overview of the entertainment industry. Students will learn to identify common core technologies and business practices that cross over all areas in entertainment.

### ***[EIT 161] Introduction to Copyright and Trademark Law***

This course will examine the principal areas of federal copyright and trademark law as they specifically relate to the entertainment industry. Main areas of study will include: music, film, theater, television, and other multi-media industries. Related legal areas such as defamation, rights of privacy and publicity, and methodology which will center around statutory and basic entertainment case law analysis will also be discussed.

### ***[EIT 180] Critical Listening and Sound Analysis I***

An introduction to critical listening for sound production.

### ***[EIT 181] Audio Technology Theory***

An introductory course in audio terminology and theory. Students will be introduced to standard audio production gear (EQ, Compression, Effects) and its operation. Principles will be presented through readings, recording, and lectures. Hands-on sessions will provide opportunities for basic skills acquisition. Students must attend scheduled events on some evenings and weekends as part of this course.

### ***[EIT 182] Introduction to Audio Recording***

An introductory course in audio recording. Students will be introduced to standard audio recording processes within different areas of the entertainment industry.

### ***[EIT 261] Legal and Ethical Issues in Entertainment***

This course examines legal and ethical issues in the entertainment field. Intellectual property areas studied include: music, film, theatre, media arts, and other entertainment sectors pertaining to consumers as well as those who participate in the creation of such media, including: digital/copyright issues; publishing, licensing and distribution; the role of attorneys, managers, agents, and unions; ethical issues in the manufacture of "talent," cultural appropriation and exploitation, and popular entertainment issues of censorship, race, and misogyny. MnTC Goal 9.

### ***[EIT 280] Critical Listening and Sound Analysis II***

The second of a two-course sequence. Students will learn to identify specific recording techniques and their role in a final production. Students will be required to devote significant time to assigned listening of recordings, audio/video works and live performances.

### ***[EIT 281] Studio and Live Productions***

This course discusses proper recording techniques for live and studio performances. Principles will be presented through readings, recording, lectures and hands-on training.

### ***[EIT 361] Entertainment Activity***

Individual activity based on students chosen entertainment emphasis. Most of the class will involve hands on production work. Class participants will further hone their learned skills in a professional working environment under the supervision of an instructor. Students must be prepared to work at nights, weekends and off campus for some events. Must be repeated four (4) times for credit.

### ***[EIT 362] Artist and Venue Management***

This course will cover a variety of topics related to managing artists and venues of varying types and sizes. Students will need to be available to tour certain facilities on certain evenings or weekends as part of this course.

### ***[EIT 381] Studio Projects***

A course that teaches equipment and techniques of studio audio production including, multi-track recording, microphone techniques, mixing and use of effects devices.

### ***[EIT 382] Live Sound Reinforcement and Recording***

Course focuses on live sound reinforcement/recording. Students will gain experience in the set-up and operation of sound reinforcement systems and audio processing devices. Live microphone techniques for reinforcement and recording will be studied. Additionally, students will learn necessary organizational skills required to successfully oversee an event. Students must attend certain events on evenings and weekends.

### ***[EIT 383] Sound for Film and Video***

Course designed to explore location sound basics, and producing audio for film and video. Topics include: Basics of audio and sound systems, digital audio formats, MIDI, hard-disk recording, sequencing, editing, and mastering. Sound design and multi-channel audio will also be discussed.

### ***[EIT 461] Entertainment Entrepreneurship***

Seminar covering broad range of current topics related to the entertainment industry.

### ***[EIT 463] Entertainment Case Law***

This course will closely and critically analyze the major cases that define various concepts of the entertainment industry. This will include seminal cases in the area of Fair Use, Co-Authorship, Royalties, Film Distribution and other essential entertainment sector aspects. Methodology will be via readings and briefing of US case law. We will also spend time explaining how the court system of the United States works.

### ***[EIT 469] Internship***

Internship in an entertainment-related field. Students wishing to enroll must get approval from their academic advisor. A maximum of 3 internship credits may be applied to the degree.

### ***[EIT 481] Advance Studio Projects***

Individual projects in studio production. Must be repeated for credit for EIT major.

***[EIT 492] Professional Seminar***

Capstone course in Entertainment Industries and Technology. Students will present written research within their chosen sector of the entertainment industry, and distill their findings into a professional portfolio.

**Eurospring**

***[EURO 351] Main Lecture Topic***

This course will be focused on a specific period in western intellectual history such as the renaissance, revolution to the enlightenment, or the enlightenment to the industrial age.

***[EURO 352] A Topical Course in Dramatic Literature***

A topical course which covers various periods in dramatic literature.

***[EURO 353] A Topical Course in Literature***

A topical course which covers various topics in literature.

***[EURO 354] A Topical Course in Art and Architecture***

A topical course which covers various periods in art and Architecture history.

***[EURO 355] A Topical Course in Politics, Power, and the Law***

A topical course which covers various periods of the exercise in politics, power, and law.

***[EURO 356] A Topical course in Science and Discovery***

A topical course which covers various periods in science and discovery.

***[EURO 357] A Topical Course in Music***

A topical course which covers various periods in the history of music.

***[EURO 358] A Topical Course in Women's Studies***

A topical course which covers various periods in women's history.

***[EURO 372] Eurospring History and the Social Sciences***

Guided by the tour leader, students will synthesize their overall experiences, including prep course briefings, field trips and personally planned Easter break and museum visits and the Grand Tour in order to meaningfully answer broad thematic questions central to the LASC learning outcomes for History and the Social Sciences. MnTC Goal 5.

### ***[EURO 373] Eurospring Humanities: Arts, Literature and Philosophy***

Guided by the tour leader, students will synthesize their overall experiences, including prep course briefings, field trips and personally planned Easter break and museum visits and the Grand Tour in order to meaningfully answer broad thematic questions central to the LASC learning outcomes for the Humanities. MnTC Goal 6 and Goal 8.

### ***[EURO 374] Eurospring Study Tour***

This course is preparation for and participation in a 21-day study tour, which visits cities in Europe such as Paris, Rome, Venice, Prague, Berlin, and Amsterdam. Guided tours are included, and students develop a study plan for sites they visit in each city on their own. Students will engage in careful preparation for all aspects of their time abroad. The course will cover culture, logistics, troubleshooting, self-sufficiency, and teamwork. The course includes mandatory orientation sessions in addition to the 3-week study tour.

### ***[EURO 390] Topics in Eurospring***

This is an upper division topics course and may be repeated when the topic changes.

## **Exchange**

### ***[EXCH 301] National Student Exchange I***

National Student Exchange

### ***[EXCH 302] National Student Exchange II***

National Student Exchange II

### ***[EXCH 320] Portsmouth Exchange I***

This is the first semester of a study abroad program at the University of Portsmouth in Portsmouth, England. Study is available in a limited number of disciplines.

### ***[EXCH 321] Portsmouth Exchange II***

This is the second semester of a study abroad program at the University of Portsmouth in Portsmouth, England. Students may study in a limited number of disciplines.

### ***[EXCH 323] International Exchange Program I***

International Exchange Program I

### ***[EXCH 324] International Exchange Program II***

International Exchange Program II

### ***[EXCH 326] Keele University Exchange I***

Keele University Exchange I



***[EXCH 327] Keele University Exchange II***

Keele University Exchange II

***[EXCH 329] University of Lincoln Exchange I***

This course is the first semester of an exchange between MSU and the University of Lincoln in the United Kingdom. Students may study in a limited number of disciplines.

***[EXCH 330] University of Lincoln Exchange II***

This course is the second semester of an exchange between MSU and the University of Lincoln in the United Kingdom. Students may study in a limited number of disciplines.

***[EXCH 341] Worldwide Institutions I***

This is a formal exchange course whereby MSUM students attend Worldwide Institutions during fall semester.

***[EXCH 342] Worldwide Institutions II***

This is a formal exchange course whereby MSUM students attend Worldwide Institutions during the spring semester.

***[EXCH 343] Worldwide Institutions III***

This is a formal exchange course whereby MSUM students attend Worldwide Institutions during the summer semester.

***[EXCH 361] Kanda University Exchange I***

This is the first semester of an exchange program which allows MSUM students to attend Kanda University in Japan.

***[EXCH 362] Kanda University Exchange II***

This is the second semester of an exchange program that allows MSUM students to attend Kanda University in Japan.

***[EXCH 365] University of Sunshine Coast, Australia Exchange***

This is a formal exchange course whereby MSUM students attend the University of Sunshine Coast in Australia during the fall semester.

***[EXCH 366] University of Sunshine Coast, Australia Exchange***

This is a formal exchange whereby MSUM students attend classes at the University of Sunshine Coast in Australia during the spring semester.

***[EXCH 367] Kanto Gakuin Japan Exchange I***

This is a formal exchange course whereby MSUM students attend the Kanto Gakuin University in Japan during the fall semester.

***[EXCH 368] Kanto Gakuin Japan Exchange II***

This is a formal exchange course whereby MSUM students attend the Kanto Gakuin University in Japan during the spring semester.

***[EXCH 374] Tsuda Japan University Exchange I***

This is a formal exchange course whereby MSUM students attend the University in Tsuda Japan during the fall semester.

***[EXCH 375] Tsuda Japan University Exchange II***

This is a formal exchange course whereby MSUM students attend the University in Tsuda Japan during the spring semester.

***[EXCH 376] Agder Norway University Exchange I***

This is a formal exchange course whereby MSUM students attend the University in Agder Norway during the fall semester.

***[EXCH 377] Agder Norway University Exchange II***

This is a formal exchange course whereby MSUM students attend the University in Agder Norway during the spring semester.

***[EXCH 378] Chung-Ang South Korea University Exchange I***

This is a formal exchange course whereby MSUM students attend the University in Chung-Ang South Korea during the fall semester.

***[EXCH 379] Chung-Ang South Korea University Exchange II***

This is a formal exchange course whereby MSUM students attend the University in Chung-Ang South Korea during the spring semester.

**Film Studies**

***[FILM 100] Technical Training: Video Production***

This course is designed to develop a thorough understanding of the technical equipment needed for the first level Video Production course. This includes detailed training in the operation of video editing software, title graphics software used in video postproduction, video camera operation and camera support equipment, and the tools of video lighting. Individual sessions will focus on specific types of equipment and development of proficient use in the production of video projects. Concurrent registration in FILM 172 is required.

### ***[FILM 101A] Practicum***

Practical experience in a performance activity in Film.

### ***[FILM 172] Video Production***

Theory of and practical experience with video production techniques. Electronic Field Production and post production techniques will be stressed when doing out of class projects. Concurrent registration with FILM 100 is required.

### ***[FILM 180] Understanding Movies***

This liberal studies film course is designed to introduce students to the vocabulary and artistic elements of cinema. It will focus on creating an understanding and appreciation for the basics of cinematography, film sound, acting, screenwriting, directing, and narrative frameworks utilized to create film. Historical and contemporary films will be viewed as text material for analysis. MnTC Goal 6.

### ***[FILM 190] Topics in Film***

This is a lower division topics course and may be repeated when the topic changes.

### ***[FILM 200] Technical Training: Beginning Filmmaking***

This course is designed to develop proficiency in the operation of film equipment needed to produce beginning level 16mm dual system sound, black and white reversal film projects. This includes 16mm film equipment, lighting and sound equipment. Concurrent registration in FILM 284 required.

### ***[FILM 232] Principles of Make-up for Stage and Film***

Techniques and styles of make-up used in stage and film productions. Same as THTR 232.

### ***[FILM 280] History of Film***

A chronological approach to the development of the motion picture medium. Special attention to be paid to the aesthetic, political, cultural, economic and technological contexts in which American and other international cinemas developed. A studio screening/discussion session will be included in each class period where influential films are viewed and discussed. Concurrent registration in FILM 280S is required. MnTC Goal 8.

### ***[FILM 280S] Studio in Film History***

Studio credit to accompany the Film History course. Concurrent registration in FILM 280 is required.

### ***[FILM 281] Film Appreciation***

Film Appreciation is the study of the Art of Film through an examination of major American film directors, their most influential motion pictures, and the historical development of the film director's art and classic movie genres. The course traces the evolution of directorial styles and the development of film genre. Creative approaches to the medium are examined both artistically and critically. Innovative films are viewed, discussed,

and evaluated. Students learn and use the various schools and methods of film criticism, develop an understanding of aesthetic qualities in film and apply them to their writing assignments. Concurrent registration in FILM 281S is required. MnTC Goal 6.

***[FILM 281S] Studio in Film Appreciation***

Studio to accompany the Film Appreciation course. Concurrent registration in FILM 281 is required.

***[FILM 284] Beginning Filmmaking***

Theory and practice for the pre-professional filmmaker. Students learn to operate basic motion picture equipment. Projects include planning, shooting, and editing short films. Concurrent registration in FILM 200 required.

***[FILM 290] Topics in Film***

This is a lower division topical course and may be repeated when the topic changes.

***[FILM 302] Practicum***

Practical experience in a performance activity in Film.

***[FILM 371] History of LGBT Representation in Film***

This course will be an in depth examination of the cinematic representation of and filmic production by Lesbians, Gay Men, Bisexuals, and Transgender people. Films and videos from a wide spectrum of genres will be screened to substantiate both the differences and the commonalities surrounding this subject's cinematic treatment. This course will also cover certain historical and/or political events influencing queer culture, filmmakers, and their intersection. Key questions will be raised, including: How have non-dominant sexualities been portrayed in the history of cinema? Is there a "queer" way of viewing film? What role does authorship play? How, historically and in the present, have queer identities been censored and how have they eluded censorship? How have critical re-readings and camp been used to define non-dominant spectatorship? Is gayness situational, or advised by its location in other identities such as race, class, age/era, culture? MnTC Goal 7.

***[FILM 372] Editing Techniques***

This course will focus on the post-production phase of filmmaking with emphasis placed on editing theories and techniques. Projects will provide hands-on editing experience. The Apple Pro Certification process will be introduced.

***[FILM 375] Animation Techniques***

This course introduces students to traditional animation techniques such as pixilation, cut-out animation, object, line, as well as other techniques. Students will begin with the basics of frame manipulation in time-based media. Through hands-on experience, students will explore animation practices while making connections to film theory and aesthetics.

***[FILM 378] Techniques of Producing***

This course will survey the craft areas of Producing, Production Management, and Production Coordination. Students will learn practical skills as well as larger concepts behind this key area of motion picture creation.

***[FILM 383] Adaptations to Film***

This course is an exploration of the complex intersection between film and a variety of other literary and media texts. Selected poems, novels, short stories, plays, video games, etc. are analyzed in relation to film versions of the same works in order to gain an understanding of the possibilities - and problems - involved in the adaptation to film.

***[FILM 384] Techniques of Film Directing***

Theory and practice of developing artistic and technical skills in directing motion pictures. Special emphasis given to the importance of the director/actor relationship. Major filmmaking projects include scene study work with crews and actors.

***[FILM 385] Survey of International Cinema***

A study of major world cinemas, including influential filmmakers, screen personalities, and motion pictures. The interrelationship of national film movements and how they impact world cinema. Representative work from European, Eastern, and Third World cinema will be presented. A screening/discussion portion of the course will focus on important films of the world cinema which will be discussed, and critically evaluated. Concurrent registration in FILM 385S is required.

***[FILM 385S] Studio in International Cinema***

Studio credit to accompany the International Cinema course. Concurrent registration in FILM 385 is required.

***[FILM 386] Genre Studies***

Intensive study of a particular film genre. Analysis and discussion of specific generic conventions, historical shifts within the genre, and theoretical foundations. Potential course topics include: Science Fiction, American Screen Comedy, Film Noir, Horror Film, Westerns, Animation, etc. May be repeated when genre studied is different.

***[FILM 387] Director Studies***

Study of the work of selected film directors. The course will analyze and evaluate a director's dominant themes, creative content, historical context and cinematic style. This course may stress the work of a single director or compare elements of two or more directors. Potential course topics include: Alfred Hitchcock, John Ford, Frank Capra, Howard Hawks, Steven Spielberg, Woody Allen, etc. May be repeated when the film director studied is different.

***[FILM 388] Research Methods in Film & Media Arts***

In-depth study of specialized forms of film, historical periods, Hollywood studios and other topical areas of film study. Potential course topics include: Films of the 40's, American Silent Film, Exploring Films: Elements of Great Movies, Cult Films, Women in Film, etc. May be repeated when the topic changes.

### ***[FILM 390] Topics in Film***

This is an upper division topical course and may be repeated when the topic changes.

### ***[FILM 400] Technical Training: Intermediate Filmmaking***

This course is designed to develop a thorough understanding of the technical equipment needed for the Intermediate level 16mm sync sound filmmaking course. This includes detailed training in the operation of 16mm film cameras including: Arriflex BL cameras and camera support equipment such as: tripods, dollies, jib arms etc., and the tools of film lighting and grip training. Extensive training in the use of double system sync sound recording methods will also occur. Individual sessions will focus on specific types of equipment and developing proficient use in the production of film projects. Concurrent registration in FILM 484 is required.

### ***[FILM 416] Special Projects in Film***

Advanced individualized creative or investigative work in a particular phase of film study. May be taken more than once if content is substantially different.

### ***[FILM 469] Internship***

A supervised, practical experience in film studies. A maximum of 12 internship credits may be applied to the degree.

### ***[FILM 470] Undergraduate Teaching Assistant***

Students will serve as a teaching assistant for select Film Studies courses under the guidance of a faculty mentor. May be repeated up to three times for credit. Minimum GPA of 3.0 in major coursework is required.

### ***[FILM 472] Advanced Video Production***

Produce a series of programs to be aired. Includes all levels from writing and casting through taping and post-production.

### ***[FILM 480] Film Theory and Criticism***

Film Theory and Criticism prepares students to "read" films with a greater understanding of the major issues and debates in film criticism of the last 70 years. The course introduces students to classical and modern film theory. Heavy emphasis is placed on analytical writing about film.

### ***[FILM 484] Intermediate Filmmaking***

This course is an advanced production course that provides an introduction to and foundation in techniques of double system synchronous sound 16mm filmmaking. In addition to this technical training, the course emphasizes the development of sophisticated creative methods in the areas of visual style and storytelling. Through readings, lectures, screenings, demonstrations and individual and group film projects, students will gain a solid understanding of technical concepts unique to sync sound 16mm filmmaking and will continue to develop sophistication as filmmakers. This course will place special emphasis on the qualities of sync sound recording methods, black & white cinematography and lighting. Concurrent registration in FILM 400 required.

### ***[FILM 490] Topics in Film***

This is an upper division topical course and may be repeated when the topic changes.

### ***[FILM 492A] Senior Seminar Project Development***

A preparatory practicum class involved in pre-production activities designed to facilitate the senior thesis project class (Film 492B) taken during the spring semester.

### ***[FILM 492B] Senior Seminar***

Capstone course for Film Studies majors; proposal, completion, and presentation of projects; pre-professional skills; written exam integrating and applying knowledge from separate courses. Grade of "C" or higher is required for graduation.

### ***[FILM 497] Independent Study***

Independent Study in Film

## **Finance**

### ***[FINC 325] Financial Institutions and Markets***

This course introduces an understanding of interest rates and their relationship to the value of bonds and stocks. The course will provide an overview of the bond and stock markets; the reasons they exist, their role and functions and how they operate. The course will provide a synopsis of financial institutions (banks, savings and loans, and credit unions) and non-financial institutions (stock brokerage firms, insurance companies, and mutual funds).

### ***[FINC 340] Financial Management***

Students are introduced to the principles of finance. Basic issues of business finance including investment, financing and dividend policies are explored. Students learn about the functioning and regulations of financial markets. Students must have junior standing.

### ***[FINC 345] Personal Finance***

The primary aim of this course is to help you plan for a successful financial future. This course provides a comprehensive, user-friendly treatment of financial planning--including personal financial statements and budgets, cash management, consumer credit, consumer durables, housing, insurance, investments, retirement and estate planning -- developing the understanding and appreciation necessary to be successful in today's financially complex world.

### ***[FINC 352] Principles of Insurance and Risk Management***

This course provides a study of the basic concepts of business and personal risks from the standpoint of creation, identification, reduction, elimination, and evaluation of risks. The use of insurance in meeting problems of risk is also covered in this course.

### ***[FINC 354] Real Estate Finance and Investments***

This course is a study of valuation, financial analysis, and investment analysis of real estate. Real estate development and financing sources are examined. Federal income taxes as they affect real estate investment are also considered.

### ***[FINC 360] Principles of Investment***

This course provides a basic understanding of the functioning of securities markets, individual investment alternatives, issues involved in investment theory and practice, and investment analysis and valuation. Emphasis is placed on the understanding of the background terminology and risk/return characteristics of different investment opportunities.

### ***[FINC 425] Bank Management I***

This course applies traditional finance concepts to the management of commercial banks. It emphasizes the structure of the financial services industry and specifically the banking sector, financial analysis, decision-making, and specific problem-solving techniques. The course provides a basic understanding of the issues confronting bank managers today, fundamental financial models, and the risk/return impacts of various credit, investment, operational, and funding decisions. The course focuses on the drivers of bank financial performance and the principal risk influences bank executives face.

### ***[FINC 426] Bank Management II***

This course extends the content of Bank Management FINC 425 and the management of commercial banks to a more advanced level. The course continues the concepts introduced and developed in FINC 425 associated with the analysis and bank performance drivers, balance sheet structure, and risk management/mitigation. It advances critical concepts that represent primary dimensions within most commercial banks within the present operating environment with more in depth and engaged analyses of loan (credit) underwriting (commercial and commercial real estate), secondary market residential mortgage lending, the role (structure, development, and analysis) of mortgage-backed securities in modern bank investment portfolios, and interest rate risk modeling. Students will participate in a mock loan committee as presenters of a loan proposal. The course introduces the impact of decision making on bank performance via a dynamic bank performance simulation exercise employed throughout the duration of the course, aimed to challenge the student to engage strategies in pursuit of growth, market position, and quite essentially, long-term profitability. Asset-liability management concepts are investigated as the determinants of risk and reward. The course focuses on the drivers of bank financial performance and the principal risk influences bank executives face every day within a setting where students realize the consequences of decisions.

### ***[FINC 441] Advanced Financial Management***

This course provides knowledge of advanced issues in financial management. Current issues in financial management are explored.

### ***[FINC 445] International Financial Management***

International Financial Management is the sub-area of finance that studies the international investment decisions concerning real and financial assets. This course is intended for students who wish to learn the concepts and theories of modern multinational financial management. International Financial Management



gives participants a solid theoretical and practical background that serves to better understand (1) the determinants of currency exchange rates, (2) the importance of risk management in a Multinational Corporation (MNC); (2) the particularities of corporate finance, and corporate governance in a global context.

#### ***[FINC 446] Financial Decision Making***

This course moves away from textbooks to learning the skills and issues involved in the financial management of a corporation through academic and professional articles. Several important concepts of financial management are applied to real-life situations through the use of case problems. These cases provide insights into some of the problems a firm faces and how they can be addressed.

#### ***[FINC 450] Entrepreneurial Finance***

Entrepreneurs like the adrenaline generated by managing a new business opportunity. Examples of new business opportunities are (1) the development of a new product or service, (2) the management of a franchise, and (3) the optimization of an existing company with problems. However, one of the areas where entrepreneurs have fewer skills is financial management which includes basic accounting, fund raising and cash management. Entrepreneurial Finance is a comprehensive course that not only reviews finance specific concepts but also introduces new financial concepts that are important to the entrepreneur, including how to take into consideration in the valuation process the managerial flexibility that comes with the incremental uncertainty the entrepreneur faces.

#### ***[FINC 460] Portfolio Analysis and Management***

This course involves analysis of techniques used in combining securities into portfolios. Students will examine various classes of securities and investments meeting a proper balance for investor needs.

#### ***[FINC 462] Financial Analysis and Valuation***

This course provides in-depth knowledge of valuation models and their practical application. The primary focus is equity valuation techniques. This includes data gathering and analysis of financial statements, analyzing cash flow, estimating the cost of capital, and forecasting cash flows. Discounted cash flow and relative valuation models are utilized in case studies to practice equity valuation. Additional topics covered include an introduction to fixed income valuation, alternative investments, and the ethics and professional standards related to the practice of valuation.

#### ***[FINC 463] Futures and Options***

Advanced study of the pricing and use of derivative market instruments, current topics and issues.

#### ***[FINC 465] Portfolio Management Practicum***

This course provides students an opportunity to gain practical investment management experience with an actual investment portfolio. Students will invest and monitor funds available through the Dragon Investment Fund, a donor sponsored fund for this purpose. As essential component of preparation for management of investment analysis and selection, and the management of the Dragon Investment Fund, students will be exposed to more advanced concepts in security and portfolio risk dynamics, risky asset combinations and portfolio optimization, investment security analysis and valuation techniques, and portfolio performance measurement.

### ***[FINC 469] Internship***

A supervised, practical experience in finance. A maximum of 12 internship credits may be applied to the degree. Prerequisites: FINC 340 plus 6 credits in Finance beyond FINC 340.

### ***[FINC 480] Portfolio Management Practicum***

This course is designed to give students an opportunity to gain practical investment management experience. Students will invest and monitor funds available through the Dragon Investment Fund, a donor sponsored fund for this purpose. May be repeated up to 3 credits.

### ***[FINC 490] Topics in Finance***

This is a senior level topics course and may be repeated as topic varies.

### ***[FINC 497] Independent Study***

Individual inquiry into an aspect of finance not covered in the regular curriculum.

## **First Year Experience**

### ***[FYE 101] First Year Experience***

An introduction to the demands and challenges of higher education. The course is designed to strengthen student success in college through personal and academic skills development. The skills include: study skills, notetaking, time management, critical thinking, career/life planning and interpersonal relationships.

## **Geoscience**

### ***[GEOS 102] Geology in the National Parks***

Study of the processes that have shaped the Earth, including earthquakes, volcanoes, erosion, glaciation, sedimentation, structural deformation; and the geologic history of North America, including mountain building and ocean advances and retreats. Focus on the geological features seen in our National Parks. MnTC Goal 3.

### ***[GEOS 110] Introductory Physical Geography***

Basic elements of geography including weather and climate, vegetation, soils and landforms. MnTC Goal 3.

### ***[GEOS 111] Cultures and Regions***

This course will introduce the foundations for studying the development of cultures and cultural diversity in the world, introduce the foundation concepts of Regional Geography, and study the interrelation between cultures, regions, their environments, and their activities. MnTC Goal 7.

### ***[GEOS 115] Physical Geology***

The nature of the earth, its description and the processes that govern its formation and change; including rocks and minerals that make up the earth, their characteristics and how they form; volcanic eruptions;

earthquakes; weathering and the transport and deposition of sediment; mineral and energy resources; and the nature of other planets in our solar system. Must also register for GEOS 115L. MnTC Goal 3.

### ***[GEOS 115L] Physical Geology Lab***

This lab must be taken concurrently with GEOS 115 Physical Geology.

### ***[GEOS 116] Historical Geology***

Earth history from its beginning to present, including formation of continents, origin and destruction of mountain ranges, advances and retreats of oceans, processes that formed layers of rock and the principles by which they are "read", and what fossils tell about ancient living communities and the environments they lived in. Lab included. MnTC Goal 3.

### ***[GEOS 117] Water, Land, and People***

Focuses on the most recent changes in the earth and the portion of the earth with which people have the most interaction, including water, soil, air, and landforms developed by rivers, wind, and glaciers, with emphasis on how our environment influences and is influenced by human activity. Concurrent registration in GEOS 117 Lab required. MnTC Goal 3.

### ***[GEOS 117L] Water, Land and People Lab***

This is a zero-credit lab that must be taken concurrently with GEOS 117 Water, Land, and People. MnTC Goal 3. Focuses on the most recent changes in the earth and the portion of the earth with which people have the most interaction, including water, soil, air, and landforms developed by rivers, wind, and glaciers, with emphasis on how our environment influences and is influenced by human activity.

### ***[GEOS 170] Earth Science Today***

A survey of the components of Earth Science needed for teacher licensure in Minnesota, including aspects of physical geology, historical geology, astronomy, and meteorology. Particular emphasis is placed on critical evaluation of evidence, how we know things in science, what the implications are for our society, and on actual investigation. Topics include volcanoes and earthquakes, the influence of chemical change on natural resources and environment, plate tectonics, planetary science, phases of the Moon, stories told by rocks of the Earth, how weather features form and move, and Earth's climate. Lab included. MnTC Goal 3.

### ***[GEOS 190] Topics in Geosciences***

This is a topical course and may be repeated when the topic changes.

### ***[GEOS 205] Thinking Spatially***

This course covers the analysis of three dimensional physical and/or social information across landscapes, including dynamic interactions among spatial variables and how they change with time. Students will learn to think spatially at different time and spatial scales, understand spatial terms (e.g., proximity, shape, density, position, adjacency, gradient, and others), translate 3D features from the real world to 2D features on maps, and make inferences about causation based on observed spatial correlations.

### ***[GEOS 207] GPS Field Techniques***

This course introduces students to Global Positioning System (GPS) data collection techniques commonly used to map point, line, and polygon features in the field. Experience with hand-held GPS units will be complemented by theoretical and background discussions of GPS and techniques for importing and manipulating GPS data in ArcGIS software.

### ***[GEOS 210] Cartography***

This course covers elements of map design including projection from globe to map, map composition, graphic tools of mapmaking, and different map types and their origins, uses, and their underlying strengths and limitations. Students will gain experience with map construction from both traditional pen and ink production to the modern output of Geographic Information Systems.

### ***[GEOS 235] Geography of Minnesota and North Dakota***

Survey and analysis of the physical and cultural environments of Minnesota and North Dakota.

### ***[GEOS 290] Topics in Geosciences***

A topical course in geosciences which may be repeated when the topic changes.

### ***[GEOS 301] Archaeological Prospection***

Examination of geophysical prospecting methods available for archaeological research. Emphasis on the conceptual basis of different prospecting methods and their application in archaeological and geotechnical studies. Hands-on experience with geophysical instruments. Same as ANTH 301

### ***[GEOS 302] Mineralogy***

This course introduces students to the crystal structure, chemistry, physical properties, geological and chemical environments of formation, and natural occurrence of minerals. Understanding of minerals and mineralogy is foundational to geology and it is recommended that this course be taken prior to other upper level geology courses where possible. Lab included.

### ***[GEOS 302L] Mineralogy Lab***

This is a mineralogy lab course that must be taken concurrently with GEOS 302.

### ***[GEOS 303] Petrology***

This course examines how sedimentary, igneous, and metamorphic rocks form, focusing specifically on the chemical and textural information that reveals information about Earth's past and present. Understanding of petrology is foundational to geology and this course is prerequisite for several upper level geology courses.

### ***[GEOS 303L] Petrology Lab***

This is a petrology lab course that must be taken concurrently with GEOS 303.

### ***[GEOS 305] Oceanography***

Introduction to oceanography, with emphasis on: ocean-atmospheric interaction and global climate, plate tectonics and morphology of the ocean basins, marine geology, energy resources, environmental problems due to sea level rise, coastal erosion, oil spills, and life in the sea. One field trip to observe shoreline processes is required. A special fee will be assessed to students participating in the field trip to cover the transportation costs. MnTC Goal 10.

### ***[GEOS 307] Introduction to GIS***

Students will use Geographic Information Systems (GIS) techniques to acquire, adjust, extend, modify, integrate, analyze, map, and manage digital spatial data (both rasters and vectors) across space and time, using the standard ArcMap interface and extensions (especially 3D Analyst and Spatial Analyst) and customized toolboxes in ESRI's ArcGIS suite of software. This course builds on concepts introduced in the Thinking Spatially (GEOS 207) and Cartography (GEOS 210) courses and applies them to physical, biological, and social data within a GIS.

### ***[GEOS 310] United States and Canada***

Regional survey of United States and Canada with emphasis on regional contrasts and interrelationships. MnTC Goal 5.

### ***[GEOS 315] Sedimentology and Stratigraphy***

Classification and description of the various kinds of sediments and sedimentary rock units; sedimentary facies; cyclic sedimentation; and techniques of correlating sedimentary rocks. Laboratory exercises will be incorporated into the lecture period. One field trip is required. A special fee will be assessed to those students electing to participate on an optional field trip to cover transportation costs.

### ***[GEOS 320] Economic Geography***

This course will focus on the geography of human economic activities, including agriculture, mining, manufacturing, trade, and the global patterns of world economics. MnTC Goal 8.

### ***[GEOS 325] Reading Landscape: Ways of Seeing***

Explores the landscape concept as developed and applied within anthropology and the geosciences. Considers the interaction of culture and perception in the way we view our physical world. Writing Intensive.

### ***[GEOS 330] Elementary Meteorology***

The basic elements of weather, including temperature, pressure, condensation and precipitation, air masses and fronts, vorticity, jet streams and storms. MnTC Goal 3 and 10.

### ***[GEOS 335] Environmental Geography and Conservation***

This course is a description, analysis, and spatial study of environmental problems including food supplies, energy resources, pollution of all types, wildlife habitat and habitat loss, and environmental change and

degradation. The course will also explore the human impacts on environment and ecosystems, and discussions of conservation and preservation issues. MnTC Goal 10.

### ***[GEOS 340] Economic and Environmental Geology***

This course introduces students to aspects of geology important in understanding earth's energy and mineral resources and how human activities in extracting and using those resources affect our environment. Key topics covered include an introduction to water movements on and in the ground (hydrology), how pollutants move in that water, the geochemical interactions among earth, water, and air, ore-forming and oil-forming processes, economic considerations important in the use of natural resources, and environmental laws.

### ***[GEOS 350] Geoarchaeology***

Examines the application of Geoscience methods and techniques to archaeological deposits and materials. Emphasizes foundational concepts in Geoarchaeology, the role of Geoarchaeology in contemporary archaeology, and the application of geoarchaeological knowledge and skills to inform archaeological interpretation.

### ***[GEOS 360] Planetary Science***

A synthesis of current knowledge of the members of the solar system and the origin and evolution of planetary systems. Lab included. MnTC Goal 3.

### ***[GEOS 360L] Planetary Science Laboratory***

This is a planetary science lab course that must be taken concurrently with GEOS 360.

### ***[GEOS 370] Structural Geology and Mapping***

This course covers key aspects of structural geology including deformational structures, deformational styles, and material properties. The lab focuses on mapping skills such as interpretation of geological maps and inferring cross-sectional view based on map views.

### ***[GEOS 370L] Structural Geology and Mapping Lab***

This is a structural geology and mapping lab course that must be taken concurrently with GEOS 370.

### ***[GEOS 390] Topics in Geosciences***

This is a topical course and may be repeated when the course topic changes.

### ***[GEOS 397] Research in Geosciences***

Individual research in collaboration with instructor. Product may be a written report, publication, or report at a professional meeting. Project and its format must be accepted by research advisor before registration. May be repeated for different research projects.

### ***[GEOS 403] Introduction to Remote Sensing***

This course provides an introduction to the use of remotely sensed data in environmental research. Remote sensing is the science of acquiring data using the measurement of electromagnetic radiation by techniques that do not require actual contact with the object or area being observed. Most environmental applications of remote sensing use instruments carried on satellites. The different sensors used to collect this information, and the interpretation techniques vary quite widely, and are being developed at an astounding rate. In this course, we will focus on the interpretation and applications of data from space-borne imaging systems (eg: Landsat MSS, Landsat TM, Landsat ETM+, Quickbird, IKONOS, MODIS, ASTER, AVHRR).

### ***[GEOS 407] Spatial Analysis***

Students will use advanced GIS techniques to spatially adjust, extend, modify, integrate, analyze, visualize, and correlate digital spatial data (both rasters and vectors) across space and time using ESRI's ArcGIS extensions (especially 3D Analyst and Spatial Analyst) and customized toolboxes in ArcGIS. This course builds on concepts introduced in the Thinking Spatially (GEOS 207) and Introduction to GIS (GEOS 307) courses and applies them to physical and social data in a GIS.

### ***[GEOS 410] Eastern Europe and Russia***

This course is a regional study of Eastern Europe and Russia which will focus on the global importance of the nations of this region, and the origins of their influence. An understanding of the physical and cultural characteristics of the region will provide a foundation for the understanding of the events of recent history, and the geographic significance of the nation-states of the region. MnTC Goal 8.

### ***[GEOS 415] Reading Geochemical Fingerprints***

This course addresses the geochemical processes by which the Earth has become chemically differentiated, the impact of that differentiation on humans past and present, and the ways by which chemical fingerprints can be used to understand past human activities. Students can expect to learn about ore and soil-forming processes, processes for chemical and isotopic differentiation in the lithosphere, hydrosphere and atmosphere, statistical methodologies for studying chemical differences, analytical methods for measuring chemical and isotopic properties of earth materials, influence of geographic distribution of resources on human occupation, and the use of chemical information in archaeological studies. Students will participate in solving geochemical and archaeological puzzles using chemical, mineralogical and textural information.

### ***[GEOS 416] Paleontology***

An introduction to the history of life on Earth. Lectures focus on concepts in paleontology including origin of life; evolution; ecology; and use of fossils in the solution of geologic problems. Characteristics of common fossils will be the focus of the laboratory. Two lectures and one one-hour lab per week. One field trip is required; up to two optional field trips possible (fee will be required to cover travel cost of trips).

### ***[GEOS 417] Taphonomy and Paleoecology***

This course will explore the variety of processes that affect the condition and formation of fossils, and the use of this information in the fields of paleontology, paleoecology, and archeology to make interpretations concerning environments and specific processes. Taphonomic processes in both marine and terrestrial environments, and the effects on invertebrate and vertebrate fossils will be addressed. This course will include at least one weekend field trip, and students will be expected to pay a small fee to cover transportation costs.

### ***[GEOS 450] Field Geology***

This is a three week course that will be offered during the summer. Students will be exposed to the basics of geologic reconnaissance, measurement of stratigraphic sections, mapping on aerial photographs and topographic maps, and construction of structure sections. The course will also introduce students to the regional geomorphology, stratigraphy, and structure through South Dakota, the Black Hills, Wyoming, Montana, Yellowstone Park, and Theodore Roosevelt Park. An additional fee will be assessed to students to cover the cost of lodging, food, and transportation.

### ***[GEOS 455] Field Methods in Geoarchaeology***

Provides field experience with a variety of geoarchaeological techniques applied within the context of an interdisciplinary research program. Research design and the research process will also be emphasized. In addition to the listed pre-requisite, students must have taken at least one entry level geology course. Same as ANTH 455.

### ***[GEOS 469] Internship***

A supervised, practical experience in the field, with report, journal, or other synthesis done in consultation with an MSUM advisor. A maximum of 12 internship credits may be applied to the degree.

### ***[GEOS 490] Topics in Geosciences***

This is a topical course and may be repeated when the course topic changes.

### ***[GEOS 492] Senior Seminar***

Student and faculty participants will give oral presentations of their own independent research and/or critical evaluation of professional literature. The course will review methods of library research and Geoscience research. Students must have taken at least one introductory course in Geosciences and must have attained junior status in a Geoscience major.

## **Graphic Communications**

### ***[GCOM 150] Survey of Graphic Communications Industry***

A survey of various graphic communication production processes and careers. The survey topics include, but are not limited to, computer graphics, desktop publishing, web design, multimedia, animation, virtual reality, commercial printing, photography, and television.

### ***[GCOM 190] Topics in Graphic Communications***

This is a lower division course in Graphic Communications and may be repeated when the topic changes.

### ***[GCOM 255] Beginning Computer Graphics***

Computer graphics pertains to the production of print related 2D graphics, illustrations, typesetting, and preparation of press-ready art. This course introduces students to the Macintosh computer and Photoshop, Illustrator and InDesign software applications.



### ***[GCOM 266] Introduction to Multimedia***

Exploration of different modes of multimedia production to include computer-based music, television, film, and the Internet.

### ***[GCOM 290] Topics in Graphic Communication***

This is a lower division topical course and may be repeated when the topic changes.

### ***[GCOM 355] Intermediate Computer Graphics***

This intermediate course builds on the student's basic knowledge of computer graphics pertaining to the production of print related 2D graphics, illustrations, typesetting, and preparation of press-ready art. The Macintosh platform and the software applications used in the graphic communications industry will be explored in more depth.

### ***[GCOM 366] Intermediate Web Design***

GCOM 366 focuses on current tools used in front end web design and development. Subjects include site planning and concept development, foundational HTML5 and CSS, forms, and FTP clients. Advanced topics will include JavaScript libraries, SEO, analytics and social media.

### ***[GCOM 368] Advanced Web Design***

GCOM 368 builds on the skills and subjects mastered in Intermediate Web Design. Subjects include advanced HTML5 and CSS3, responsive design, CSS frameworks and preprocessors, scrolling and parallax sites, PHP, and Content Management systems.

### ***[GCOM 390] Topics in Graphic Communication***

This is an upper division topics course and may be repeated when the topic changes.

### ***[GCOM 455] Advanced Computer Graphics***

Advanced Computer Graphics is an in-depth exploration of two of the most widely used programs in the graphic communications industry today, Adobe Illustrator and Adobe Photoshop. In this course, students will learn advanced techniques in Adobe Illustrator, how to combine Adobe Illustrator and Adobe Photoshop files, and will begin learning advanced techniques in Adobe Photoshop.

### ***[GCOM 457] Digital Prepress***

Digital Prepress includes all facets of a project from concept to print. It is not only important to know how to use computer applications to create projects for print, it is also important to know how to create these projects so that they are capable of being printed. This requires knowledge of printing processes and materials and how they fit together with what is created on the computer. This course is based upon the offset lithographic printing process and the digital prepress process that it uses. It utilizes Macintosh computers and programs that are used in the graphic communications industry today.

### ***[GCOM 458] Digital Design and Production Studio***

Advanced study in digital design & production techniques. GCOM 458 is the culminating course in the computer graphics and digital prepress course series. It is designed to bring together all of the computer graphics and digital prepress knowledge already learned, to prepare students for presenting projects, working with clients, and to continue the in-depth exploration of Adobe Photoshop.

### ***[GCOM 468] Interactive Multimedia Studio***

Interactive Multimedia Studio provides students with the opportunity for high-level studio practice in multimedia design. It builds sequentially upon the skills and knowledge of multimedia by providing a focus on creative image and media production for a range of art and design applications.

### ***[GCOM 469] Internship***

Available to all Graphic Communications students in junior or above status. Approved practical work experience. Supervised by departmental faculty. A maximum of 12 internship credits may be applied to the degree.

### ***[GCOM 490] Topics in Graphic Communication***

This is an upper division topics course and may be repeated when the topic changes.

### ***[GCOM 492A] Graphic Communications Final Project A***

Capstone experience for Graphic Communications students. Culminating final project focusing on skills and knowledge ascertained from previous semesters. Students must also complete GCOM 492B the following semester. Only for GCOM majors in senior status and consent of advisor.

### ***[GCOM 492B] Graphic Communications Final Project B***

Capstone experience for Graphic Communications students. Culminating final project focusing on skills and knowledge ascertained from previous semesters. Students must be GCOM majors in Senior status and successful completion of GCOM 492A as well as completion of all other GCOM program requirements, with the exception of GCOM 452, prior to registering for this course

### ***[GCOM 497] Independent Study***

Independent study in graphic communications. May be repeated for credit.

## **Graphic Design**

### ***[GDES 203] Introduction to Graphic Design***

Studio inquiry into the nature of graphic design. Including: Visual problem-solving, introduction to typography, symbols, lettermarks, logotypes, publication design, information design, three-dimensional design, as well as client/designer relations, studio operations and production procedures.

### ***[GDES 303] Typography***

This course will cover the fundamentals of typography as they relate to the graphic design profession. Beginning with the history and origins of the alphabet, to classic type families, to working with type measurements and terminology, concluding with contemporary typographic design. Traditional to experimental typography will be explored.

#### ***[GDES 304] Experience Design***

Experience Design will explore visual semiotics and the interaction between the viewer and the visual design. How metaphors can help to visually explain ideas to a user/viewer. A focus will be on using interaction design, information architecture, and user research. The application of research, analysis, and intuition.

#### ***[GDES 305] Visual Systems and Brand Identity***

Visual systems and brand identity will begin with an introduction in designing visual systems. From there it will explore how to create a brand identity and the implementation of the brand strategy.

#### ***[GDES 306] Motion Design: Typography and Visual Narratives***

This course is aimed at expanding students' typographic, visual and aural narrative through the use of time-based composition, animation and sound in a studio setting. Studio practice is supplemented by examination of historical, theoretical, and perceptual aspects of motion graphics. Prerequisite: 304B Graphic Design Studio.

#### ***[GDES 307] Advanced Typographic Design***

Advanced studies in typography. The course will expand on GDES 303 and the use of typography from practical to experimental. Typography is everywhere from print, to web, to time and motion. Students will further study and analyze typography to learn what is appropriate, and not, in design solutions. They will explore when clear communication is required, and when to use type to visually entertain.

#### ***[GDES 375] The History of Graphic Design***

Since the beginning of time humans have developed methods of communication and ways to record the visual world around them. These visual recordings evolved into language and communication. From cave drawings, Sumerian scribes, Egyptian artisans, medieval illuminators, printers, to today's mobile apps the profession of graphic design has evolved. This is an in-depth study into the history of visual communication.

#### ***[GDES 390] Topics in Graphic Design***

Studio, seminar or discussion of topics not included in other graphic design courses. This is a topical course and may be repeated when the topic changes.

#### ***[GDES 469] Internship***

Students will seek and secure an internship with a professional design studio. The internship should provide a learning experience under the mentorship of a design professional.

#### ***[GDES 485] Scotland Tour***

This is a summer tour to Scotland for approximately a three week time period with a fourth week spent in Amsterdam, Netherlands. The time in Scotland is spent exploring the rich cultural history of the country as well as contemporary trends in art and design. It is expected that the student will complete extensive research into Scottish culture, history, and styles of art and design before the trip. This knowledge will be helpful in the daily trips to various locations within the country. The last part of the trip is usually spent in Amsterdam, Netherlands which also has a rich culture and history. During the trip the student is expected to keep a sketchbook, gather research materials, and photograph/film for further development of their final creative project.

### ***[GDES 490] Topics in Graphic Design***

Studio, seminar or discussion of topics not included in other art courses. Up to four credits may be applied to the major. This is a topical course and may be repeated when the topic changes.

### ***[GDES 492A] BFA Senior Project I***

This course and GDES 492B are used as the capstone experience in producing a senior project, exhibition, and the development of a portfolio.

### ***[GDES 492B] BFA Senior Project II***

This course and GDES 492A are used as the capstone experience in producing a senior project, exhibition, and the development of a portfolio.

### ***[GDES 494] Mentored Research in Graphic Design***

Guided research designed to increase the professionalism of the student's creative work in all aspects of design production. The course will culminate in the production of a creative portfolio of superior quality.

### ***[GDES 497] Independent Study in Graphic Design***

Individualized instruction in media not regularly offered in studio concentrations.

## **Health**

### ***[HLTH 110] Personal Health and Wellness***

This class assists students in examining their personal level of wellness, which includes physical fitness, making good nutrition choices, maintaining a healthy body composition, dealing effectively with stress, determining personal risk for cardiovascular disease and cancer, making wise choices in drug use and avoiding abuse, protecting one's self against sexually transmitted diseases and identifying skills for developing and maintaining successful interpersonal relationships.

### ***[HLTH 125] First Aid and CPR***

To provide the citizen responder with the knowledge and skills necessary in an emergency situation to help sustain life and minimize pain and the consequences of injury or sudden illness until medical help arrives. Successful completion leads to American Red Cross certification in cardiopulmonary resuscitation (CPR) for adult, child and infant, and First Aid Responding to Emergencies.

***[HLTH 190] Topics in Health***

This is a topics course which may be repeated as course content may vary.

***[HLTH 290] Topics in Health***

This is a topics course which may be repeated as course content may vary.

***[HLTH 305] Introduction to Nutrition***

An introductory course in nutrition focusing on improving personal food choices, discriminating between sources of nutritional information, proper diet planning and maintaining healthy weight.

***[HLTH 311] Health in the Elementary Schools***

This course emphasizes maintaining and improving personal health and wellness and developing and using motor skills for an active classroom. It also is a preparation for pre-service teachers to take part in developing health behaviors in their pre-primary through 8th grade level students. This course includes methods of instruction.

***[HLTH 327] Safety Education and Consumer Protection***

Study and evaluation of factors in safety awareness, accident prevention and consumer protection.

***[HLTH 330] Disease Prevention***

Introduction to common diseases with an emphasis on primary, secondary and tertiary prevention in health education and health promotion.

***[HLTH 335] Health Education and the Middle Level Adolescent***

The middle level adolescent (children between the ages of 10 and 14) experiences dramatic changes in nearly every aspect of their physical, social, emotional, and intellectual lives. Health Education and the Middle Level Adolescent addresses these special considerations, as well as the special role of health education within the goals and philosophy of the middle level approach.

***[HLTH 340] Health Methods and Materials***

Students learn to design, implement and evaluate health lessons related to the National Health Education Standards and the Centers for Disease Control priority areas. Emphasis is placed on developing lesson plans that incorporate measurable objectives and a variety of teaching methods for students in grades 9-12.

***[HLTH 390] Topics in Health***

This is a topics course which may be repeated as course content may vary.

***[HLTH 412] Education for Sexuality and HIV/AIDS***

This course trains health education majors and minors to carry out sexuality education for students in grades 7-12. Emphasis is placed on developing self-esteem, healthy relationships, and social skills. Current educational research is applied to promote sexual health in children, adolescents, and adults.

***[HLTH 465] Coordinated School Health Programs***

A step-by-step approach to developing, implementing, and evaluating coordinated school health programs that include school health instruction, school environment, guidance and counseling, health services, food and nutrition programs, physical education, school site health promotion and the development of school and community partnerships.

***[HLTH 469] Internship***

Designed for Community Health and Health Service Administration majors. Involvement in field work by placement in health related governmental, volunteer, non-profit, or commercial agencies. A maximum of 12 internship credits may be applied to the degree.

***[HLTH 490] Topics in Health***

This is a topics course which may be repeated as course content may vary.

**Health Services Administration**

***[HSAD 218] Introduction to Healthcare and Global Health***

This course is designed to provide an introductory perspective of health care; issues related to cost, quality, and access; policies, financing, and community health initiatives. Additionally, various health care models that are used around the world, factors related to global health problems, and the interprofessional collaboration needed to address these challenges will be discussed. MnTC Goal 8.

***[HSAD 290] Topics in Health Services Administration***

Topics in HSAD which may be repeated as course content may vary.

***[HSAD 326] Epidemiology and Introductory Biostatistics***

This course will provide students with an understanding of basic concepts and methods of epidemiology and biostatistics. The course covers epidemiological methods and biostatistical procedures, and emphasizes how these concepts can be used to examine disease status and exercise control mechanisms in the field of health services administration. Epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries are discussed. Additionally, students will be introduced to tools and concepts of biostatistics and how these concepts can be applied to epidemiology, the practice of public health and population-based management.

***[HSAD 350] Evidence Based Program Planning and Research Methods***

This course covers topics related to research methodologies, data collection strategies, and program evaluation methods in healthcare organizations. There will be an emphasis on qualitative and quantitative research design, statistical methods, and ethical standards/issues while conducting research with human

participants including vulnerable populations. Students will develop the ability needed to identify, examine, and utilize an evidence based approach in making better decisions.

### ***[HSAD 390] Topics in Health Services Administration***

Topics in HSAD which may be repeated as course content may vary.

### ***[HSAD 400] Aging in the United States: Intro to Gerontology & Sr. Support Care***

This course is designed to provide an overview of the field of gerontology with an emphasis on senior care and services/resources available to meet the needs of elderly population. The course considers the continuum of care including home care, assisted living, skilled nursing facilities and hospice. The role of technology, including gero-technology, in improving quality of life is examined.

### ***[HSAD 401] Health Aspects of Aging***

This course is designed to provide an understanding about adult development and aging. The purpose of the course is both to provide a general introduction to the field of gerontology and specific focus on some aspects of aging behavior.

### ***[HSAD 403] Health Informatics***

This course is designed to provide a broad perspective of the field of Health Informatics. This course is appropriate for students in Nursing, Community Health, Social Work, Health Services Administration, Business Administration and Health Education. The course focuses on information retrieval, risk management and evaluation, healthcare ethics, confidentiality and analysis of data. Students will get an overview about areas of employment opportunities in the field of health informatics.

### ***[HSAD 414] Healthcare Strategic Planning and Marketing***

This course is designed to provide a comprehensive view of healthcare strategic planning and marketing processes and the application to healthcare services delivery.

### ***[HSAD 416] Healthcare Leadership and Management***

Healthcare Leadership and Management involves the management theories and practices within variety of health care settings including acute care, clinical, community health, and long-term care organizations. There will be a strong focus on organizational behavior theories, leadership and planning, personnel management and information technology, as well as risk management, and utilization review.

### ***[HSAD 417] Quality Management in Health Care***

Quality Management in Health care is designed to provide students an overview of the problems faced by the US health care system and how implementation of quality improvement (QI) strategies can help in addressing these concerns. Students will develop an understanding of the role of interdisciplinary teams in patient care process, application of process improvement methodologies, and how to manage and lead change initiatives in health care organizations.

### ***[HSAD 418] Healthcare Law and Ethics***

Provides an overview of the legal and ethical issues specific to the healthcare industry.

#### ***[HSAD 419] Healthcare Finance and Reimbursement Methods***

This course is designed to provide an overview of the current healthcare financial climate, introduction to tools and techniques as well as terminology used in health care financial management. There will be a strong focus on budgeting and resource allocation. The course will provide a foundation of reimbursement methods as they apply to health care settings.

#### ***[HSAD 420] Health Policy and Economics***

This course is designed to provide a comprehensive view of the economic forces that shape change in today's healthcare delivery system. The course will explore the basic framework of health policy within the United States and the functioning of the healthcare delivery system in a complex social environment. The course provides a fundamental foundation for understanding the principles of healthcare economics, theory of demand and supply, and how these impact the healthcare market.

#### ***[HSAD 421] Long Term Care Administration***

Overview of how the elderly receive care and support in their home and a variety of institutional settings. Focus on the impact of federal and state law-regulations on the delivery of care; the organization of a nursing home and how the delivery of services are arranged; and integrated in the delivery of care and the techniques and processes for effective long term care management.

#### ***[HSAD 422] Regulatory Management in Healthcare***

This course examines legal and ethical issues faced by aging populations and topics related to regulatory management of senior support services in communities and institutional settings. Additionally, concepts related to healthcare reimbursement methods are addressed.

#### ***[HSAD 468] Internship Seminar***

The internship seminar is designed to provide information that will enhance the overall internship program. This course prepares the student to move into the internship experience by selecting a potential site for the internship experience. This course will create a professional foundation for the student to draw upon moving into the internship experience. A maximum of 1 credit can be taken towards seminar course.

#### ***[HSAD 469] Internship***

The internship is designed to provide students with valuable real-world experience in healthcare, generally with local providers and/or organizations. Students receive academic credit for work of significant practical value to the sponsoring facility and the intern, performed under the supervision of the Health Services Administration faculty. A maximum of 12 internship credits may be applied to the degree.

#### ***[HSAD 471] Domains of Practice Practicum***

The practicum is designed to provide students with valuable real-world experience in long term care, generally with local providers. Students receive academic credit for work of significant practical value to the sponsoring



facility and the intern, performed under the supervision of the Health Services Administration faculty. This practicum prepares students for the national examination.

***[HSAD 490] Topics in Health Services Administration***

This is a topics course which may be repeated as course content may vary.

**History**

***[HIST 101] Critical Issues in U.S. History***

This course aims to develop students' critical thinking and multicultural skills by using four case studies in American history. The case studies offer the opportunity for the student to experience the history of multicultural America through engagement with primary and secondary sources in a variety of written and oral exercises. MnTC Goal 2.

***[HIST 103] Debating Sustainability***

Debating the major issues in sustainability. MnTC Goal 2.

***[HIST 104] World History I***

World Civilizations from the ancient through classical periods and up to 1500. (Same as INTI 104) MnTC Goal 5.

***[HIST 105] World History II***

The World since 1500; history of world civilization and the growth of the modern global community through politics, economics and culture. MnTC Goal 5 and 8.

***[HIST 121] History of the United States to 1877***

The colonial beginnings to the end of Reconstruction; the founding of the American society and growth of the new nation through the aftermath of the Civil War. MnTC Goal 5.

***[HIST 122] History of the United States Since 1877***

The Gilded Age and 20th century; the development of modern industrial America to world power status. MnTC Goal 5.

***[HIST 190] Topics in History***

Selected topics and regions in historical perspective. Designed especially for the liberal arts student, the course may be repeated for credit under a different subtitle as the subject matter changes. Not applicable to History or Social Studies majors.

***[HIST 205] Introduction to Historical Methods***

For History and Social Studies majors, this is an introduction to the fundamental skills and proper conduct of the historical professional. Students will become familiar with the various schools of historical thought,

available primary and secondary source material, correct citation of sources, potential careers in history, as well as the research, drafting, refining and presentation of a polished historical research paper.

***[HIST 220] Asian-American Experience***

This course studies the changing images of Asians in America, and discusses how race, class, and gender have shaped the experiences of different Asian ethnic groups. MnTC Goal 7.

***[HIST 226] Introduction to Cultural Management***

This course introduces students to opportunities for careers working in museums, galleries, theatres, consultancies, tourism, and other cultural institutions. Students will engage with area professionals to learn about their work; read and discuss practices, standards, and issues in working with the general public; and work on group projects to begin developing the appropriate communication skills.

***[HIST 244] Women in World Religions***

HIST 244 will survey how gender power and control is represented in various cultural belief systems and expressed in religious practices. The class will stress the concepts of utilizing social norms and historiographical theory in order to analyze human behaviors. The class will also explore the concept of "cultural heritage" and will investigate how it affects the student's personal worldview, values and assumptions. In order to accomplish this goal, the students will be introduced to a wide variety of primary and secondary source documents as well as examples of material culture, and will be expected to provide written analysis of these items. Same as WS 244. MnTC Goal 7.

***[HIST 276] The World of Food***

Using food and eating as a way to connect disparate cultures and geography, this course discusses issues of global concern such as food security, famines, the gendering of food, GMO crops and food as an industry, as well as topics like religious food restrictions, vegetarianism, local foodsheds, allergies, food and identity and food in popular culture. MnTC Goal 8.

***[HIST 290] Topics in History***

This course is a topics course and may be repeated when the topic varies.

***[HIST 301] East Asian History I***

Traditional China, Japan, and Korea from the Neolithic cultures to mid-19th century.

***[HIST 302] East Asian History II***

East Asia since 1830: Western intrusion, reform, revolution and contemporary issues.

***[HIST 304] Africa in World History***

Africa's role in global history, including the spread of Christianity and Islam, the slave trade, colonialism, and Apartheid. MnTC Goal 5 and 8.

### ***[HIST 310] Topics in European History***

Selected topics in European history.

### ***[HIST 311] Topics in North American History***

Selected topics in North American history.

### ***[HIST 312] Revolutionary Games***

Using unique pedagogical role-playing exercises, students will participate in crisis turning points of world history, taking on the roles of leaders attempting to grapple with issues like war, natural disaster, minority rights, religious tolerance and immigration. These exercises lead to a major self-reflection project on the relevance of this experience to students' contemporary lives. MnTC Goals 5 and 9.

### ***[HIST 315] Minnesota and the Upper Midwest***

Historical development of the upper Midwest region with particular focus on the State of Minnesota.

### ***[HIST 317] Medieval Europe***

An analysis of European history from 500 to 1450, focusing on the political, social, religious, and intellectual trends of the period. The early Germanic kingdoms, the medieval papacy, feudal relations, the expansion of towns and commerce, and the rise of national monarchies will receive particular emphasis.

### ***[HIST 319] Early Modern Europe***

Examines the transition from medieval to modern Europe between 1450 and 1750. The Renaissance and Reformation, European overseas expansion, the Scientific Revolution and Enlightenment, and the rise of the modern state, culture, and economies will receive particular emphasis.

### ***[HIST 321] History of Britain I***

Survey from Neolithic settlement to 1714, with emphasis on the legacies of Britain's various settlers, the development of parliament as an institution, the relationship between England, Scotland, Ireland and Wales, the Reformation and early colonization. (Same as LGST 321)

### ***[HIST 322] History of Britain II***

Survey from 1714 to the present, with emphasis on the formation of the British Empire, industrialization, social and political reform movements and decolonization and political devolutions of the late 20th century.

### ***[HIST 323] Nineteenth Century European History***

Covering the French Revolution to the outbreak of WWI, this course focuses on the major powers of Europe (France, Germany, Britain, Austria-Hungary, Italy and Russia), with emphasis on the development of key concepts such as industrialization, mass society, the concert of nations, social reform and nationalism.

### ***[HIST 324] Twentieth Century Europe***

Europe's transition from imperial powers to the formation of the European Union, including both World Wars, the development, rise and decline of fascism and communism as state ideologies, the modern European welfare state, economic reorganization and ethnic conflict in contemporary Europe. Same as INTL 324.

***[HIST 334] Latin America***

Major trends in Latin America in the 19th and 20th centuries. MnTC Goals 5 and 8.

***[HIST 336] History of Mexico***

An examination of the major themes in the development of the Mexican nation with the emphasis on the period since independence.

***[HIST 337] Peru and the World***

Peru's interaction with the world. Major emphases include the Inca empire, Spanish Conquest, the Guano Age, and Peru as a tourist destination. Course includes a trip to Lima, Cuzco, and Machu Picchu over spring break. MnTC Goal 8.

***[HIST 346] Modern China***

China from the late Qing period to the present with emphasis on the revolutionary movement and attempts at modernization.

***[HIST 347] Modern Japan***

Japan from the Tokugawa period to the present. Focuses on the course of modern transformation: seclusion, industrialization, militarism, reform and reemergence as an economic superpower.

***[HIST 350] Women in European History***

The historical experience of European women as a force in politics, in economic and familial roles, in organized religion and in cultural life, and with special emphasis on the "woman question". Same as WS 350.

***[HIST 359] Colonial America***

This course is a study of the age of exploration and the establishment of the North American colonies. Emphasis will be given to the British colonies of the western hemisphere, but the course will also include those colonies of other nations as they affect American growth and development. It will include a broad treatment of social, political, economic, and intellectual forces to 1763.

***[HIST 360] Revolutionary America***

A survey of rising British colonial protest after 1763, the subsequent war for American independence, and the ultimate establishment of the U.S. constitutional system by 1789.

***[HIST 361] Antebellum America***

This course will focus on the competing economic systems of developing northern merchant capitalism and southern slavery and examine the impact of these two systems on the politics, social relations, and culture of every day Americans in the antebellum (1790-1848) period.

***[HIST 362] Civil War and Reconstruction***

A survey of Civil War and Reconstruction periods in American history examining the causes and consequences in social, political, military and constitutional areas.

***[HIST 363] Gilded Age and Progressive Era***

Designed to fulfill an upper-level U.S. history requirement for History and Social Studies majors, this course surveys the history of the United States from roughly 1877 to 1920, a period of western settlement, industrialization, massive immigration, and the rise of cities. These developments involved wrenching changes, and the course will examine the problems that were created and the efforts of reformers to address those problems.

***[HIST 366] Constitutional History of the United States to 1865***

The origins and development of the American Constitution from Colonial times to the beginning of the industrial age.

***[HIST 369] The United States in Vietnam, 1945-1975***

A survey of the causes, conduct, and consequences of America's longest war. The political, military, and social aspects of United States involvement with Vietnam will be studied. Satisfies the North American area in the History and Social Studies majors.

***[HIST 372] Natural Disasters***

This class is a research-seminar style course that surveys the history of natural disasters (earthquakes, floods, tornadoes, etc.), throughout history, focusing on the political, economic, and social causes and effects of disasters. The class will engage in an in-depth case study of one disaster, requiring students to do extensive primary and secondary source research, present their findings at the Student Academic Conference, and in class to their peers. MnTC Goal 5 and 10.

***[HIST 373] Monsoon Asia: People and the Environment***

An introduction to the environmental history of South, East and Southeast Asia with emphasis on the modern period. Topics include the environmental factor in the fall of the Indus and Huanghe Civilizations, unsustainable development in traditional Asian societies, impacts of imperialism on the Asian environment, consequences of industrialization, and contemporary environmental issues. MnTC Goal 5 and 10.

***[HIST 374] Plagues & Peoples: Disease and the Environment***

This course introduces the student to the complex and interdependent relationship humans have with disease and the environment. We have long recognized the environment in which we live and work plays a key role in our physical health. To help us understand our modern social, medical, and political response to epidemic disease, we will examine the ways epidemics have taxed economic, religious, and political resources through

time. Additionally, we will look at ways society reacted to epidemic disease, and how the medical community evolved to meet this threat. MnTC Goal 5 and 10.

***[HIST 375] Women in United States History***

Women's experiences in the family, work, religion, reform, and the women's rights and feminist movements; seeks to understand women's issues in historical perspective.

***[HIST 377] African-Americans in U.S. History***

The historical experience of African Americans from slavery to the present; how American society has oppressed African Americans and how they have struggled against that oppression, with particular emphasis on organized resistance in the era of the Civil Rights movement.

***[HIST 379] Environmental History***

This course is a study of the history of humankind's interactions with the environments focusing on the past 500 years. Special attention will be paid to the non-Western world. Topics include global interconnectedness and the spread of disease, the relationship between trade, modern economics, and sustainable development, natural disasters, and the rise of the ecological movement. MnTC Goal 5 and 10.

***[HIST 383] Ancient Near East I (Greece)***

This course examines the politics, culture, and society of the Ancient Near East (c.3000 BCE-c.300 BCE) including Persia, Mesopotamia, Egypt and surrounding areas. The course will outline the political narrative while featuring, myth, religion, gender, architecture and art. Using both secondary and primary sources, the course will also trace the achievements of Alexander the Great.

***[HIST 384] Ancient Near East II (Rome)***

This multi-faceted course examines the cultural, political, spiritual, intellectual, and social-economic developments of the ancient Near East, including the Hellenistic World, Persia, North Africa and Rome c. 300 BCE-600 CE. Special topics include politics, empire building, religious cults, Christianization of the late Roman Empire, textual and material sources for the conversion of Constantine, architecture and gender in the Roman world.

***[HIST 385] History of Christianity***

This course surveys the theological, political and cultural history of Mediterranean Christianity c. 4 BCE-400 CE. The semester is divided into five units: the historical Jesus, Paul, Patristics, Asceticism & Heresy, and Early Christian Rome. Other themes include: women, angels, sacred space, martyrdom and sanctity.

***[HIST 390] Topics in History***

This is an upper division topical course and may be repeated when the topic varies.

***[HIST 397] Independent Study***

Independent Study in History

### ***[HIST 440] Secondary Social Studies Instruction***

Concentrates on the designing of instructional units for middle school and high school social studies' classrooms. A variety of instructional resources, teaching methodologies, and assessment techniques will be explored.

### ***[HIST 469] Internship***

History majors gain on-the-job experience in a supervised situation with cooperating private or public agencies. A maximum of 12 internship credits may be applied to the degree.

### ***[HIST 490] Topics in History***

This is a senior level topics course and may be repeated as topic varies.

### ***[HIST 492] Senior Seminar***

Problems in history for advanced students.

### ***[HIST 497] Independent Study***

Directed readings and discussion on particular topics agreed upon by instructor and student.

## **Honors**

### ***[HON 102] Honors Encounters***

Experience the breadth of university life by attending and writing reports on any combination of at least three Honors Lectures, other lectures, performing arts, and exhibitions approved by the Honors Director or Honors Program Committee. Alternatively, Honors Encounters credits may be earned by learning abroad, conducting independent research or creative activities beyond course and major requirements, or learning foreign languages beyond major requirements. May be repeated up to eight times.

### ***[HON 200] Honors Colloquium in the Humanities***

This course will examine texts from a range of disciplines and periods that define "home" as well as the space of the Other. The colloquium will stress formal and informal discussion of ideas. The course is designed to synthesize skills from the Honors Foundation and serve to further develop capacity for independent thought. Building on the skills practiced in the Honors Foundation courses students will develop skills through extensive class discussion, analytical and research writing, oral report, and lecture. MnTC Goal 6.

### ***[HON 290] Topics in Honors***

This is a topics course which may be repeated when the content varies.

### ***[HON 300] American Society***

Examines some of the major political, economic, and cultural developments in American life during roughly the past century. Possible topics include concentration of political and economic power, bureaucratization and

its effects, revolutions in class structures, race and ethnicity in politics, and the consequences of the decline of American empire. MnTC Goal 5.

***[HON 301] Masterpieces of Literature***

Consists of careful reading of selected masterpieces of world literature combined with intense discussion and exchange of ideas. Possible works to be covered include selections from Homer, Dante, Shakespeare, Dostoevski, Yeats, Camus and others. May be repeated once when content changes. MnTC Goal 6.

***[HON 302] Tellings and Retellings***

This class consists of the intensive examination of certain key classic texts, such as Shakespeare's Othello, and their "retelling" in other artistic disciplines by other artists. In exploring these retellings the class examines both the formal elements of--say--musical or movement expression (to name just two) in order to understand how a written text can be "translated" into other media and also examines how the values embedded in a particular text can be altered or even transformed in another version. MnTC Goal 6.

***[HON 306] Human Nature in the Western Tradition***

An examination of current psychological theories regarding human nature and potential, and the evolution of those theories within Western philosophy and literature.

***[HON 307] Transformation of the Roman World: 31 B.C. to A.D. 312***

An introduction to the Roman Empire, both its Eastern and Western components, as the setting in which Christianity appeared. The introduction of art, archeology, and literature as the primary sources for interpreting the growth of the Christian religion in the first three hundred years of the common era. MnTC Goal 5.

***[HON 312] Journeys in Literature: Classical and Medieval Masterpieces***

Examines variations of the journey-theme-inward quests and worldly voyages-in literary masterpieces from Classical Antiquity through the Middle Ages (to c.1400), both East and West. Texts will include The Epic of Gilgamesh, The Aeneid, Nikki, T'ang Dynasty poetry, Beowulf, The Divine Comedy, Travels of Marco Polo, and others. MnTC Goal 6.

***[HON 314] Space, Time, and Change: Revolutions in Self Perception***

This science course examines the scientific basis for three great revolutions in human understanding: The realization that the universe is very large, that it has existed for a very long time, and that every part of it changes with time (focusing in particular on changes in the stars, in the earth, and in life). We will consider how this understanding has influenced human world views and religious beliefs. The course includes lectures and lab activities as well as open discussion of assigned readings. During discussions, students are encouraged to explore and share their own world views as well as examine the views of others. MnTC Goal 3.

***[HON 315] Science and Time***

An examination of the concept of time in science with special emphasis on the historical field sciences of paleontology and archaeology. Topics to be considered in this course include evolution and change in



historical sciences, as well as discussions of calendars and standard forms of time-reckoning. The contrast between relativistic time and ordinary time will be reviewed in order to highlight different scientific study in an interdisciplinary format and to experience an issue-oriented presentation of scientific materials.

### ***[HON 318] Issues of the Nuclear Age***

Science and mathematics are fundamental to a strong society. This course demonstrates general methods of scientific thinking that can be applied to everyday life. We will discuss concepts and principles important for making decisions about radiation and nuclear technologies, such as food irradiation, nuclear weapons, and nuclear power. In particular, you will learn about nuclear physics, and its impact on social issues. You will perform lab activities, discuss or debate ideas, and write analytical papers. MnTC Goal 3.

### ***[HON 320] History of Science***

In this course, students will examine and learn: The scientific method; the historical development of key natural science disciplines; key people and time periods in the development of disciplines; a framework for evaluating past experimental efforts; an understanding of current scientific approaches and data; and how science has impacted society throughout history and continues to impact our society today. Lab included. MnTC Goal 3.

### ***[HON 324] Life and Death in the Universe***

The last century will be remembered in small part as a time when humans finally started scientifically addressing the most fundamental questions about the universe: "How did the Universe begin," "How did life on Earth begin and how might it end," and "Is there anyone out there?" Students will address these issues by reviewing our current scientific understanding of the Big Bang, the origins of life on Earth, the Evolution of Life, and the possible origins of intelligent life elsewhere. The class will be cross-disciplinary with heavy emphasis on astronomy, planetary geology, biology, and some history. In addition to in-lecture coursework, lab activities are used to provide students the opportunity to plan, design, and execute their own investigations of these scientific concepts. MnTC Goal 3.

### ***[HON 372] Natural Disasters***

This class is a research-seminar style course that surveys the history of natural disasters (earthquakes, floods, tornadoes, etc.), throughout history, focusing on the political, economic, and social causes and effects of disasters. The class will engage in an in-depth case study of one disaster, requiring students to do extensive primary and secondary source research and present their findings in class to their peers. MnTC Goal 5 and 10. Honors Program Goals: This class seeks to focus on developing your critical thinking across disciplines, communication skills, and personal growth through intellectual independence. By choosing a research topic of interest to you, preparing a proposal, presenting your findings, and writing a substantial research paper, you have the opportunity to integrate the knowledge provided by the class into the fabric of your honors education.

### ***[HON 386] Eureka! A History of Mathematical Ideas***

We will explore the history of mathematics from ancient to modern times by using famous equations as entry points to different periods in mathematical history. Once in a period we will explore the development of mathematics at that time, the people involved in that development, the culture at the time, and then fast

forward to the modern implications of that particular branch of mathematics. We will move chronologically and connect the mathematics to the development of science, politics, art, music, and many other fields.

### ***[HON 390] Topics in Honors***

This is an upper division topical course and may be repeated when the topic changes.

### ***[HON 469] Internship***

A supervised practical experience in the honors program. A maximum of 12 internship credits may be applied to the degree.

### ***[HON 492] Capstone in Ethics and Civil Responsibility***

The goal of this course is to produce an interdisciplinary scholarly and/or creative work, consistent with the goal of the Honors Program to develop independent thinkers capable of conveying their thoughts to a broad audience. Student paper and final grades will be determined by the quality of written work; assignments are not pro forma. As a Writing Intensive course focusing on Ethics and Civic Responsibility, lecture and discussion will be devoted to engaging the ethical and civic responsibilities incumbent upon professionals, as well as developing individual student projects, including writing workshops, feedback sessions, and instruction in writing matters. MnTC Goal 9.

## **Humanities**

### ***[HUM 101] Humanities Through the Arts***

An introductory, chronological examination of the arts, focusing on representative works of the Western tradition with reference to historical, literary, and other cultural developments, as well as non-Western parallels. MnTC Goal 6.

### ***[HUM 211] Perspectives on Society***

Explores visions of society (e.g. Confucius, Plato) or intercultural encounters between societies (e.g. Age of Exploration). May include works of history, literature, and political theory. MnTC Goal 6.

### ***[HUM 227] Russian Humanities***

An introduction to the culture of Russia through works selected for the insights they provide into the social and historical reality of the Soviet Union as well as for their artistic merit with concentration in the society of the last decades before the Revolution. MnTC Goal 6.

### ***[HUM 302] Liberty and Civic Responsibility in America***

The course examines the origins of the concepts of liberty and civic responsibility within the context of American culture, and how these concepts and ideals developed in American thought during the 19th and 20th centuries. MnTC Goal 9.

### ***[HUM 320] Humanities East and West***

To examine world literatures, arts and religions from a comparative perspective: parallels, contrasts, and intercultural influences between Asia and the West. MnTC Goal 6 and 8.

***[HUM 390] Topics in Humanities***

Topics appropriate to upper-division students, developed around the interests of students and instructors.

***[HUM 397] Independent Study***

May be repeated twice to a maximum of 8 credits.

**International Studies**

***[INTL 101] Introduction to Global Issues***

This course covers the history of globalization and the social, political, economic and human rights issues posed by globalization. It examines the social theories and conceptual models underlying the analysis of societal and global change. It critically examines the linkages between this community and the broader local, national and global issues and challenges. MnTC Goal 5.

***[INTL 105] World History II***

The World since 1500; the development of European global hegemony; the post-European world. Same as INTL 105. MnTC Goal 5.

***[INTL 308] Migration and Human Adaptation***

An examination of migration as an adaptive strategy used by people in adjusting to changing conditions in their environment. Explores types of migration as well as motivations and consequences of human movement in both the past and present and around the world. Same as ANTH 308. MnTC Goal 8.

***[INTL 364] International Migration***

This course is designed to develop a good knowledge of the politics, economics and international law and organizations of international migration. Same as POL 364. MnTC Goal 8.

***[INTL 370] Understanding International Security***

This course highlights a series of traditional and non-traditional security issues that have emerged on the Security Studies agenda. The course begins with traditional security concerns such as the threat and use of force, and then moves to the non-traditional issues that have emerged as the subject area has expanded. Same as POL 370. MnTC Goal 8.

***[INTL 400] Global Experience***

Development of a paper to demonstrate learning outcomes based upon an international experience of one or two semesters. Student is to analyze the cultural context of the country of study and the effect of this on his or her attitudes and understandings. This course is available as an independent study registration. Prerequisite: One or two semesters abroad.

### ***[INTL 469] Internship***

A supervised practical experience in international studies. A maximum of 12 internship credits may be applied to the degree.

### ***[INTL 490] Topics in International Studies***

This is a topical course and may be repeated when the topic varies.

### ***[INTL 492] Senior Project***

A capstone course for the international studies major in which students will work with an interdisciplinary committee of faculty to plan and develop a thesis that will be presented and defended to the committee. The student is to begin formulation in their junior year and work with a multidisciplinary committee of faculty to finalize formulation, develop an approach, and research that area. Instead of a single advisor, the committee is expected to provide advice and guidance as well as eventual evaluation of the student defense.

## **Japanese**

### ***[JAPN 101] Beginning Japanese I***

Introduction to Japanese language and culture. Emphasis placed on the spoken language and reading the Japanese alphabet. MnTC Goal 8.

### ***[JAPN 102] Beginning Japanese II***

Introduction to Japanese language and culture. Emphasis placed on the spoken language and reading the Japanese alphabet. MnTC Goal 8.

### ***[JAPN 142] Introduction to Japanese Culture***

An introduction to the major aspects of Japanese culture. Topics include arts, education, family, geography, history, language, literature, philosophy, religion and daily life. Focuses on the distinctive characteristics of Japanese culture in comparison with the Western culture. Lectures, films and discussions in English. MnTC Goal 7.

### ***[JAPN 190] Topics in Japanese Language, Literature, and Culture***

Topics in Japanese language, literature, and culture. May be repeated since content may vary.

### ***[JAPN 201] Intermediate Japanese I***

The development of academic learning skills of writing and reading, in addition to the sophistication of personal communication skills is expected. In principle, instruction is done in Japanese. English written articles as well as video programs are used for the enrichment of cultural understanding.

### ***[JAPN 202] Intermediate Japanese II***

The development of academic learning skills of writing and reading, in addition to the sophistication of personal communication skills is expected. In principle, instruction is done in Japanese. English written articles as well as video programs are used for the enrichment of cultural understanding.

***[JAPN 290] Topics in Japanese Language, Literature, and Culture***

Topics in Japanese language, literature, and culture. May be repeated since content may vary.

***[JAPN 297] Independent Study in Japanese - Intermediate Level***

Selected project agreed upon by student and instructor. May be repeated for a total of 4 credits. Approval by department chair upon presentation of proposal.

***[JAPN 390] Topics in Japanese Language, Literature and Culture***

Topics in Japanese language, literature, and culture. May be repeated since content may vary.

***[JAPN 397] Independent Study in Japanese: Advanced Level I***

A selected project as agreed upon by student and instructor. May be repeated for a total of four credits. Requires approval by department chair.

## **Languages**

***[LANG 457] Second Language Acquisition & Language Teaching***

This course covers theories of language acquisition and their application to language teaching. Includes a historical overview of the field of language teaching, an examination of factors that affect language learning, and how these factors are addressed in a classroom setting. Students will be asked to articulate the philosophical basis of their own approach to language teaching.

***[LANG 469] Internship***

Elective field experience in applied foreign language under agency and departmental supervision. Opportunity to practice and integrate classroom knowledge of the four language skills. Planning must be done at least one semester prior to the internship. A maximum of 12 internship credits may be applied to the degree.

***[LANG 471] Methods and Materials in Teaching Languages I***

Theory and practice of teaching foreign languages (K-12). The course examines current and historical trends, methods, techniques, and technology. Microteaching and assessment are part of the structure of the course. Those who are seeking a MN teaching license must complete the SARTE form before taking this course. This course is required of those who seek licensure (K-12) to teach languages in the state of MN. SPAN 301 and 302 or equivalent proficient level in the language to be taught.

***[LANG 472] Methods and Materials in Teaching Languages II***

Theory and practice of teaching languages (K-12). The course examines current and historical trends, methods, techniques, and technology, with an emphasis on microteaching, assessment, and materials preparation. This course is required of those who seek licensure (K-12) to teach languages in the state of MN.

## ***[LANG 475] Second Language Assessment***

Theories and strategies for the assessment of second language competence, including mapping assessment to state and national proficiency guidelines and standards, conducting formal and informal classroom assessment, and becoming familiar with standardized assessments.

## **Leadership**

### ***[LEAD 301] Introduction to Leadership***

Examines the major theories and perspectives of leadership. Students will gain practical leadership skills in planning, problem solving, and strategies for accomplishing goals.

### ***[LEAD 498] Leadership Seminar***

Provides an opportunity for students to discuss their leadership positions on campus or in the community. Examines in greater depth issues related to ethics, leadership, and group communication. Includes academic service-learning project conducted by the class. Includes group project.

## **Management**

### ***[MGMT 260] Principles of Management***

Analyzes functions of management and the forces that shape and define the manager's role. Students must have junior standing.

### ***[MGMT 315] Government and Business***

A survey course which includes governmental enforcement of competition, regulation of public utilities, and public enterprise. Same as ECON 315.

### ***[MGMT 370] Management Information Systems***

Study of design and use of information systems and communication processes, including recording, transmitting, and revising information as an aid in managerial decision making.

### ***[MGMT 371] Introduction to Business Analytics***

Business analytics refers to techniques used by enterprises to gain insights and make better decisions using data. It has applications in all the functional areas of an enterprise including accounting, finance, marketing, operations and strategic planning. This class is made up of three parts: i) descriptive analytics to focus on analysis of historical data; ii) predictive analytics to focus on data mining and forecasting to develop insights; and iii) prescriptive analytics to focus on optimization and simulation to select from business alternatives under constraints.

### ***[MGMT 380] Operations Management***

Description and analysis of the operations function in an organization.

### ***[MGMT 390] Topics in Management***

Topics in management. May be repeated as topic varies.

***[MGMT 405] Small Business Management***

Analysis of problems confronting the manager of small retail, wholesale, and manufacturing enterprises. Students must have junior standing.

***[MGMT 415] Industrial Organization and Public Policy***

Analysis of market structure, market conduct, and economic performance. It combines the latest theories with empirical evidence about the organization of firms and industries. Same as ECON 415.

***[MGMT 416] Labor Economics***

Wage and employment theory, labor unions and other institutions associated with collective bargaining, and social legislation. Same as ECON 416.

***[MGMT 419] Supply Chain Management***

This course will analyze the supply chain from the point of view of a manager. The goal is to understand how logistical decisions impact the performance of the firm as well as the entire supply chain. The key will be to understand the link between supply chain structures and logistical capabilities in a firm or supply chain. Topics will be covered at the strategic level, planning level as well as the operational level. There will be a mix of qualities and quantitative analysis. Same as MKTG 419.

***[MGMT 433] Predictive Analytics***

Businesses are collecting and storing vast amount of data. Business intelligence (data mining) techniques are used to turn business data into valuable information and generate business intelligence, helping organizations to make effective decisions. This course will provide an understanding of various data mining techniques such as association rules, clustering, classification techniques, etc. and how to use data mining techniques to transform large and complex data into actionable information. The data mining techniques will be examined in the context of business applications such as marketing, e-commerce, finance, and retailing. (Same as MKTG 433)

***[MGMT 440] Human Resource Management***

This course covers the process of managing the human resource to achieve organizational goals. Topics include legal recruitment and selection, training and evaluation, compensation, and separation from the organization.

***[MGMT 442] Compensation & Benefits***

This course will build a strong foundation for students in making strategic choices for organizations in the areas of compensation and benefits. It will explore current legislation, compensation systems, mandatory & voluntary benefits, and administrative issues and challenges.

***[MGMT 451] Organizational Behavior***

Studies the interaction of individuals and groups in business organizations. The course focuses on providing insights into individual, group, and organizational processes.

***[MGMT 456] Project Management in Business***

This course focuses on identifying and resolving the dilemmas that cause the overwhelming majority of projects to take too long, cost too much, and fall short of expectations.

***[MGMT 458] International Management***

An examination of organizational management in the international environment which will focus on private and public management in the exchange of goods and services in cross cultural contexts.

***[MGMT 465] Entrepreneurship***

This is a survey course examining key elements of entrepreneurial venture. Basics of entrepreneurship will be covered. We will adopt the perspective of a global entrepreneur, who may capitalize upon resources from anywhere in the world, while facing global competition and uncertainties at any time. Specific topics this course will cover include: entrepreneurial opportunity, feasibility analysis, business plan, planning for growth and change.

***[MGMT 469] Internship***

A supervised practical experience in management. A maximum of 12 internship credits may be applied to the degree. Prerequisite: Students must have completed 6 credits in Management beyond the Business Core courses prior to the internship.

***[MGMT 480] Prescriptive Analytics***

A study of deterministic techniques of management science such as linear programming, transportation models, assignment models. Other models may be covered as time permits.

***[MGMT 490] Topics in Management***

This is a senior level topics course and may be repeated as topic varies.

***[MGMT 492] Business Analytics Capstone***

All Analytics students will participate in the Capstone course typically during their final semester at MSUM. The purpose of the capstone is for students to undertake a group project(s) that applies and synthesizes what they have learned in their major (including but not limited to database management, data analysis techniques and business decisions making) to real life analytics problems. By allowing small teams of students to work collaboratively throughout the class, the Capstone course emphasizes teamwork and encourages the kind of cooperation needed to flourish in today's current professional managerial environment. The course will be taught by a multi-disciplinary faculty team drawn from different areas of expertise in Analytics. Students will attend scheduled class sessions to think critically about analytical and decision making issues and to be creative problem solvers as they navigate challenging project(s). This capstone will culminate with a written



project report and an oral presentation of their work to the students and faculty of the Analytics program, usually during the last two weeks of the semester.

***[MGMT 497] Independent Study***

Individual inquiry into an aspect of Business Administration not covered in the regular curriculum.

***[MGMT 498] Strategic Management***

Students take a top management perspective in studying strategic management principles, concepts and analytical techniques. Strategic management entails the analysis of internal and external environments of a firm to maximize the utilization of resources in relation to objectives. This capstone course will be taken after completion of all other business core courses.

**Marketing**

***[MKTG 270] Principles of Marketing***

Examining the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives. Prerequisite can be waived with consent of the instructor.

***[MKTG 311] Marketing Management***

An examination of practical marketing problems with a focus on analysis, planning, implementation, and control of worldwide marketing programs for the purpose of achieving an organization's objectives.

***[MKTG 317] Services Marketing***

This course is designed to provide knowledge needed to implement quality service and service strategies for competitive advantage across industries. The foundation of the course is the recognition that services present special challenges that must be identified and addressed.

***[MKTG 330] Personal Selling***

Utilizing the behavioral sciences to analyze the interpersonal influence process whereby potential buyers and sellers interact for the purpose of completing exchanges of goods and services. Prerequisite can be waived with consent of the instructor. Same as COMM 366.

***[MKTG 335] Retail Management***

An analysis of the activities involved in selling goods and services to the final consumer with an emphasis on retail institutions.

***[MKTG 390] Topics in Marketing***

Topics in Marketing. Course may be repeated when topic changes.

***[MKTG 419] Supply Chain Management***

This course will analyze the supply chain from the point of view of a manager. The goal is to understand how logistical decisions impact the performance of the firm as well as the entire supply chain. The key will be to understand the link between supply chain structures and logistical capabilities in a firm or supply chain. Topics will be covered at the strategic level, planning level as well as the operational level. There will be a mix of qualities and quantitative analysis. Same as MGMT 419.

***[MKTG 421] Consumer Behavior***

Using concepts drawn from the behavioral sciences to understand those activities people undertake when obtaining, consuming, and disposing of products and services.

***[MKTG 423] Marketing Communications***

A survey of the elements of promotion -- advertising, public relations, sales promotion, and personal selling -- with a strong emphasis on the strategic integration of these methods to achieve synergy in their application in the marketplace.

***[MKTG 433] Predictive Analytics***

Businesses are collecting and storing vast amount of data. Business intelligence (data mining) techniques are used to turn business data into valuable information and generate business intelligence, helping organizations to make effective decisions. This course will provide an understanding of various data mining techniques such as association rules, clustering, classification techniques, etc. and how to use data mining techniques to transform large and complex data into actionable information. The data mining techniques will be examined in the context of business applications such as marketing, e-commerce, finance, and retailing. (Same as MGMT 433)

***[MKTG 444] International Marketing***

Comprehensive study of the cultural, political, and economic factors affecting international marketing strategies.

***[MKTG 451] Marketing Research I***

This course is designed to provide an introduction to methodological issues relevant to marketing research. Students will learn basic elements of research methods, constructs, measures, data collection and analysis, and other elements of marketing research. While the underlying objective of this course is to familiarize you with basic tools in scientific methods (e.g., statistics). Marketing Research is a keystone to all marketing activities. This course specifically explores what methods exist to conduct marketing research, how to recognize effective and ineffective research, and how to analyze, interpret, and apply research results.

***[MKTG 452] Marketing Research II***

The design of this course helps students develop methods for collecting, analyzing, and interpreting data relevant to the marketing decision-making process. The purpose of this course is to investigate the issues based on observations and secondary databases. In line with the nature of reality in marketing research, this course is a team-based project-intensive course. This course expects students to have a marketing mindset as a marketing consultant and a statistic/analytic skill set in general. The course covers a gamut of marketing research process.

### ***[MKTG 465] Entrepreneurship***

This is a survey course examining key elements of entrepreneurial venture. Basics of entrepreneurship will be covered. We will adopt the perspective of a global entrepreneur, who may capitalize upon resources from anywhere in the world, while facing global competition and uncertainties at any time. Specific topics this course will cover include: entrepreneurial opportunity, feasibility analysis, business plan, planning for growth and change.

### ***[MKTG 469] Internship***

A supervised practical experience in marketing. A maximum of 12 internship credits may be applied to the degree. Students must have completed 6 credits in Marketing beyond MKTG 310 prior to the internship.

### ***[MKTG 490] Topics in Marketing***

This is a senior level topics course and may be repeated as topic varies.

### ***[MKTG 497] Independent Study***

Individual inquiry into theoretical or applied aspects of marketing not covered in regular curriculum.

## **Mathematics**

### ***[MATH 090] Elementary Algebra***

The course introduces operations and evaluating expressions involving real numbers, exponents and radicals. Solving linear, absolute value and quadratic equations, and linear and compound inequalities is also studied. Emphasis is given to procedural skills to help develop the conceptual skills needed for application and interpretation of results including graphing and problem solving skills. Credits apply towards full-time status but do not apply towards graduation.

### ***[MATH 090A] Elementary Algebra***

The course introduces operations and evaluating expressions involving real numbers, exponents and radicals. Solving linear, absolute value and quadratic equations, and linear and compound inequalities is also studied. Emphasis is given to procedural skills to help develop the conceptual skills needed for application and interpretation of results including graphing and problem solving skills. Credits apply towards full-time status but do not apply towards graduation.

### ***[MATH 095] Elementary/Intermediate Algebra***

This course is a combination of the content of Elementary Algebra and Intermediate Algebra and will be offered in a synchronous Accelerated hybrid format. Upon completion of the course, the student will be prepared for College Algebra. Topics covered will include signed numbers, radicals, exponents, algebraic fractions, products and factoring, graphing lines, solving linear equations and quadratic equations, polynomials, functions, systems of equations, linear inequalities, and absolute value equations and inequalities. Credits apply towards full-time status but do not apply towards graduation.

### ***[MATH 099] Intermediate Algebra***

Exponents, algebraic fractions, polynomials, functions, graphing lines, linear and quadratic equations, systems of equations, radicals, linear inequalities, absolute value equations and inequalities. Credits apply towards full-time status but do not apply towards graduation.

***[MATH 105] Contemporary Mathematics***

Topics selected from various areas of mathematics, showing the scope and power of mathematics and emphasizing mathematical methods and basic data analysis. Topics include voting analysis, basic financial mathematics, and basic statistics and data analysis with an emphasis on critical thinking. Not intended to prepare students for any subsequent course. Must have successfully completed Elementary Algebra or the listed prerequisites, or acceptable placement score. MnTC Goal 4.

***[MATH 110] Introduction to Mathematics***

Algebra, sets, probability, and statistics. Computational proficiency will be assessed and mastery required. Must have successfully completed Elementary Algebra or Intermediate Algebra or an acceptable placement score. MnTC Goal 4.

***[MATH 127] College Algebra***

Exponents, factoring, equations, inequalities, systems of equations, functions, exponential and logarithmic functions, polynomials and rational functions. Must have successfully completed Intermediate Algebra or have an acceptable placement score. MnTC Goal 4.

***[MATH 142] Pre-Calculus***

Includes equations, complex numbers, functions, polynomials, exponential and logarithmic functions, and trigonometric functions, equations and applications. Must have successfully completed College Algebra or acceptable placement score. MnTC Goal 4.

***[MATH 143] Trigonometry***

Trigonometric functions, identities, applications. Must have successfully completed College Algebra or acceptable placement score. MnTC Goal 4.

***[MATH 210] Concepts from Discrete Mathematics***

Logic and truth tables, sets, mathematical induction, graphs, trees, and related topics from the field of Discrete Mathematics. MnTC Goal 4.

***[MATH 227] Survey of Differential Calculus with Algebra***

Review of topics in college algebra with emphasis on solving systems of equations with unique solutions, under determined and overdetermined systems. Introduction to matrices, multiplication of matrices and inverse of a square matrix with emphasis on systems of equations and applications. Derivatives, applications of differentiation and optimization. Not open to mathematics majors or minors. Must have successfully completed MDEV 099 or acceptable placement score. MnTC Goal 4.

### ***[MATH 229] Topics in Calculus***

Introduction to differential and integral calculus with an emphasis on applications. Introduction to matrices and their applications. Not open to mathematics majors or minors. Must have successfully completed College Algebra or acceptable placement score. Requires a C- or better in MATH 127. MnTC Goal 4.

### ***[MATH 234] Introduction to Probability and Statistics***

Measures of central tendency and variation, probability, probability distributions, sampling distributions and the central limit theorem, estimation and tests of hypotheses for one and two population means and proportions, simple linear regression and categorical data analysis. May not be taken for credit by those who earned credit in Math 336. Students who have completed Math 262 are encouraged to take Math 335 rather than Math 234. Must have successfully completed College Algebra or acceptable placement score. MnTC Goal 4.

### ***[MATH 235] Introduction to R***

R is statistical software commonly used in many fields. The student will learn to write R programs that access data from multiple sources, generate output, and manipulate different types of R objects, and learn how to handle data structures such as vectors, matrices, data frames and lists, how to analyze data, create visualizations, and write flexible R functions by using different types of control structures.

### ***[MATH 260] Computer Calculus***

Introduction to applications of computer software to calculus. Students must either have taken, or be concurrently enrolled in, Math 261.

### ***[MATH 261] Calculus I***

Calculus of one variable-differentiation, introduction to the integral. Students entering Math 261 should have a solid background in algebra and trigonometry. Must have successfully completed College Algebra and Trigonometry or acceptable placement score. MnTC Goal 4.

### ***[MATH 262] Calculus II***

Calculus of one variable-transcendental functions, applications of integrals, techniques of integration, infinite series. MnTC Goal 4.

### ***[MATH 290] Topics in Mathematics***

This is a topical course in mathematics. The course may be repeated when the topic is different.

### ***[MATH 291] LaTeX***

An introduction to LaTeX, a mathematical typesetting language, including page layout commands, typesetting formulae, enumerated lists, tables, arrays, graphics, plus other packages and specialized document classes.

### ***[MATH 302] Mathematics for Early Childhood***

Development of numeration systems, whole number, integer, rational numbers, geometry, and measurement. The content focuses on appropriate representations and models specifically tied to early childhood education. Open only to majors in Early Childhood Education. Does not substitute for MATH 303 or 304. This course does not apply to the mathematics major or minor requirements.

***[MATH 303] Foundations of Number Systems***

Sets; systems of numeration; whole number, integer, and rational number operations and properties. Particularly appropriate for early childhood, elementary, and special education majors. This course does not apply to the mathematics major or minor requirements.

***[MATH 304] Informal Geometry***

Fundamental concepts of plane and solid geometry, measurement, probability, and statistics. Particularly appropriate for early childhood and elementary education majors. Students must have completed MATH 303 with a grade of "C-" or higher. Not open to mathematics majors or minors.

***[MATH 311] Introduction to Proof and Abstract Mathematics***

Logic, rules of inference, methods of proof including direct and indirect methods, sets, functions, and mathematical relations and properties of relations. Calculus II must be taken prior to or with Math 311.

***[MATH 316] Teaching Mathematics in the Middle Grades***

Materials and methods of teaching mathematics in grades 5-8. Open only to math majors with a concentration in teaching and to elementary education majors with a specialty in mathematics. In addition to those students who have completed the listed prerequisites, students who are majoring in secondary math education and who have Junior standing may take this course.

***[MATH 321] Financial Mathematics***

The purpose of this course is to provide an understanding of the fundamental concept of financial mathematics, and how those concepts are applied in calculating present and accumulated values for various streams of cash flows. Reserving, valuation, pricing, asset/liability management, investment income, capital budgeting, and valuing contingent cash flows will be discussed. An introduction to financial instruments and the concept of no-arbitrage as it relates to financial mathematics will be given. This course covers topics of CAS/SOA Actuarial Exam 2/FM.

***[MATH 323] Multi-Variable and Vector Calculus***

Calculus of several variables-- partial differentiation, multiple integration, vector calculus, line and surface integrals, Green's Theorem, and Stoke's Theorem. Students must have taken, or be currently enrolled in, Math 260.

***[MATH 327] Introduction to Linear Algebra***

Systems of linear equations, Gauss-Jordan elimination, linear programming, matrices, determinants, vector spaces, linear transformations, and eigenvectors.

### ***[MATH 335] Intermediate Probability and Statistics I***

Probability, probability distributions of discrete random variables, probability density functions, expected value and variance, sampling distributions and central limit theorem, point and interval estimation, and tests of hypotheses for the population mean. Simple linear regression, one factor ANOVA and ANOVA for regression.

### ***[MATH 336] Intermediate Probability and Statistics II***

One and two sample tests of hypotheses, Chi-square tests, analysis of variance, completely randomized and randomized block designs, least square estimation, simple linear regression, multiple linear regression, hypotheses testing and confidence intervals for regression parameters, testing of models, model selection procedures, multicollinearity, introduction of qualitative variables, estimation, interpretation, and testing of hypotheses, checking validity of models.

### ***[MATH 355] Mathematical Modeling***

Techniques of developing and analyzing mathematical descriptions of physical phenomena.

### ***[MATH 361] Intermediate Analysis I***

A rigorous treatment of concepts of calculus and foundations of mathematics including logic and sets, Bolzano-Weierstrass Theorem, limits, Heine-Borel Theorem, continuity, and derivative.

### ***[MATH 362] Intermediate Analysis II***

A continuation of the rigorous treatment of concepts of calculus and foundations of mathematics including the Riemann integral, infinite series, sequences of functions and uniform convergence.

### ***[MATH 366] Differential Equations***

Classify a differential equation. Solve a variety of ordinary differential equations and initial value problems using a variety of techniques, including finding exact solutions, numerical solutions, and power series solutions. Be able to discern qualitative information from a differential equation without finding an explicit or implicit solution. Students must meet the prerequisite or be concurrently enrolled in MATH 323.

### ***[MATH 386] Eureka! A History of Mathematical Ideas***

We will explore the history of mathematics from ancient to modern times by using famous equations as entry points to different periods in mathematical history. Once in a period we will explore the development of mathematics at that time, the people involved in that development, the culture at the time, and then fast forward to the modern implications of that particular branch of mathematics. We will move chronologically and connect the mathematics to the development of science, politics, art, music, and many other fields.

### ***[MATH 390] Topics in Mathematics***

This is an upper division topical course that may be repeated when topics changes.

### ***[MATH 392] Sophomore Seminar***

Students will attend lectures where they will be exposed to research level mathematics and general interest topics. The students will also attend lectures given by their classmates.

***[MATH 397] Independent Study***

Individual study, project, or research of special interest agreed upon by student and instructor. Requires approval of department chair and dean.

***[MATH 402] Mathematics for Special Education***

Development of number, algebra, geometry and measurement content along with methods for teaching mathematics in special education setting. Open only to majors and minors in special education. Does not substitute for MATH 406.

***[MATH 406] Mathematics in the Elementary School***

Materials and methods of teaching elementary school mathematics. Open only to elementary education majors. Taught as part of PFY. Prerequisites: MATH 303 and 304 with grades of "C" or higher.

***[MATH 411] Introduction to Combinatorics***

Permutations, Binomial Coefficients, Algebraic and Combinatorial Proof Techniques, Multinomial Coefficients, The Pigeonhole Principle, The Principle of Inclusion and Exclusion, Ordinary Generating Functions, Exponential Generating Functions, Integer Partitions, Set Partitions, Stirling Numbers of the First and Second Kind, and Bell Numbers.

***[MATH 415] Tools & Technology for Secondary Mathematics***

This course is designed to educate pre-service secondary teachers of mathematics in the integration of instructional technology to aid in the teaching and learning of mathematics. This will involve students to acquire and demonstrate expertise with software, apps, and calculators. Develop mathematics lessons using information from discussion and research. These lessons will involve students in an active and meaningful mathematical learning experience involving instructional technology.

***[MATH 416] Mathematics in the Secondary School***

Objectives, methods, materials, and evaluation of teaching mathematics in grades 9-12. This course is the upper division writing course for BS majors in mathematics with the emphasis in teaching. Students in this course must have junior standing.

***[MATH 421] Actuarial Science I***

Applications and synthesis of mathematical and statistical concepts included in the Actuarial Examination I, administered by the Society of Actuaries. Linear time series models, seasonal models, stationary models, moving average, autoregressive and ARIMA models, model identification, confidence intervals and testing, forecasting and error analysis.

***[MATH 427] Linear Algebra II***



In this course, students will learn about vector spaces, including subspaces, sums, direct sums, span, linear independence, bases and dimensions. Students will understand the relationship between matrices and linear transformations including, eigenvectors, eigenspaces, the characteristic polynomial, Jordan form, determinants and trace.

***[MATH 435] Mathematical Statistics I***

Discrete and continuous probability distributions, marginal and conditional densities, moment generating functions, transformations, and limiting distributions. Sampling distributions, parametric point estimation and tests of hypotheses.

***[MATH 450] Numerical Analysis I***

Numerical solutions to systems of equations and differential equations, finite differences, interpolation formulas, numerical calculus, and approximating functions.

***[MATH 466] Differential Equations II***

A continuation of MATH 366. The students will learn more advanced techniques for solving differential equations and modeling using differential equations. Students will also learn about partial differential equations and some basic solutions to them.

***[MATH 469] Internship***

A supervised practical experience in mathematics. A maximum of 12 internship credits may be applied to the degree.

***[MATH 476] Abstract Algebra I***

Groups, rings and integral domains studied as abstract mathematical systems. Lagrange's theorem, factor groups, homomorphisms, polynomial rings and quotient rings.

***[MATH 477] Abstract Algebra II***

Fields, Field Extensions, Galois Theory, Sylow Theorems, Finite Simple Groups, Generators and Relations and Cayley Graphs of Groups.

***[MATH 486] History of Mathematics***

Topical and chronological survey of the main branches of mathematics. Required for Math Education majors. May not be used as a restricted elective for any other emphasis nor for the B.A. degree in mathematics.

***[MATH 487] Foundations of Geometry***

Systems of geometry such as Euclidean, non-Euclidean, coordinate, synthetic, transformational and projective. Models in geometric systems.

***[MATH 490] Topics in Mathematics***

This is an upper division topical course that may be repeated when topics changes.

***[MATH 491] Mathematical Writing***

This is a writing intensive and capstone research course in Mathematics. It is intended to teach students how to research a mathematical topic and produce a written report on their research that is sufficiently deep, respects audience, and maintains clarity.

***[MATH 492] Senior Seminar***

Students will attend lectures where they will be exposed to research level mathematics and general interest topics. The students will also attend lectures given by their classmates.

***[MATH 497] Independent Study***

Individual study, project, or research of special interest agreed upon by student and instructor. Requires approval of department chair and dean.

**Media Arts**

***[MART 100] Foundations in Media Arts***

Foundations in Media Arts introduces students to various areas of study, including digital filmmaking, computer graphics, new media, technical theatre design, and the recording arts.

***[MART 290] Topics in Media Arts***

Topics in Media Arts

***[MART 390] Topics in Media Arts***

Topics in Media Arts

***[MART 490] Topics in Media Arts***

Topics in Media Arts

***[MART 492] Capstone Project in Media Arts***

Students are challenged to synthesize theory and practice through collaborative inquiry to produce a major interdisciplinary project facilitated through a seminar setting. While producing an interdisciplinary, collaborative project, students will develop a Media Arts Portfolio.

**Music**

***[MUS 107A] Music Theory I***

The first semester of the core sequence of theory courses for music majors. Pitch and rhythmic notation, intervals, scales, triadic harmony, dominant seventh chords, chord function/pluralities and beginning work in four-voice writing will be the focus.

### ***[MUS 107B] Aural Skills I***

Beginning work in the areas of sight singing (solfege), transcription (dictation), error detection and rhythmic drills.

### ***[MUS 108A] Music Theory II***

Four-voice writing in Baroque chorale style. Diatonic Harmony, non-harmonic tones, principles of harmonic progression, modulation to closely related keys, secondary dominant/diminished chords, harmonic implications of the melodic minor scale, motivic development and an introduction to jazz/commercial harmonies and chord symbol nomenclature.

### ***[MUS 108B] Aural Skills II***

Continued work in the areas of sight singing (solfege), transcription (dictation), error detection and rhythmic drills focusing more on minor mode melodies/harmonies and basic modulatory concepts.

### ***[MUS 110] Musicianship for Non-Majors***

Fundamentals of music notation, music reading, and theory. Creative application through composition and performance. Assumes minimal previous musical experience.

### ***[MUS 111] The Art of Listening***

Designed for non-majors. An introduction to music appreciation. Introduces the main elements of music, such as melody, harmony, rhythm, timbre, and form. Students will develop a vocabulary to discuss their experience of music. Students will listen to a broad repertory of music examples. MnTC Goal 6.

### ***[MUS 117] Guitar for Non-Majors***

This course provides an introduction to basic guitar performance techniques. Students need no prior study on the guitar to take this course. Students will be introduced to commonly used chords, scales, arpeggios, and right hand patterns through the use of standard notation and tablature.

### ***[MUS 140] Thinking Musically: Critical Thinking in Multi-musical America***

This course focuses on critical thinking skills using American music as a means for examining assumptions, arguments and cultural images. MnTC Goal 2.

### ***[MUS 150A] Class Piano***

Class instruction. Entry level piano course focusing on basic technique, primary chords and harmonizing. Intended for music majors/minors with limited background in applied piano instruction.

### ***[MUS 150B] Class Piano II***

Class instruction. Continuation of Mus 150A. Further development of piano technique, physical coordination and independence between the hands. Study of major scales and beginning level standard piano literature.

***[MUS 150C] Class Piano III***

Small group piano instruction. Continuation of Mus 150B. Study of beginning level classical repertoire, technique, and skills related to the Piano Proficiency examination.

***[MUS 150D] Class Piano IV***

Small group piano instruction. Continuation of Mus 150C. Study of beginning/intermediate level classical repertoire, technique, and skills related to the Piano Proficiency examination.

***[MUS 151] Basic Commercial Keyboard***

Small group keyboard instruction. Study of beginning/intermediate level popular repertoire, technique, and skills related to the Music Industry/Jazz portions of the Piano Proficiency requirements.

***[MUS 152] Class Voice***

Class instruction. Designed for students with limited background in applied voice instruction. May be repeated for credit.

***[MUS 154A] Music Performance: Voice: Level 1***

Large group instruction. May be repeated for credit.

***[MUS 154B] Music Performance: Voice: Level 1***

Individual tradition vocal instruction and master classes. May be repeated for credit.

***[MUS 155A] Music Performance: Piano: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 155J] Jazz Piano***

Individual instruction and master classes. May be repeated for credit.

***[MUS 156A] Music Performance: Trumpet: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 156B] Music Performance: Horn: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 156C] Music Performance: Trombone: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 156D] Music Performance: Euphonium: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 156E] Music Performance: Tuba: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 157A] Music Performance: Flute: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 157B] Music Performance: Oboe: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 157C] Music Performance: Clarinet: Level 1***

Individual or small group (2 or 3 person) instruction and master classes. May be repeated for credit.

***[MUS 157D] Music Performance: Bassoon: Level 1***

Individual or small group (2 or 3 person) instruction and master classes. May be repeated for credit.

***[MUS 157E] Music Performance: Saxophone: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 158A] Music Performance: Violin: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 158B] Music Performance: Viola: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 158C] Music Performance: Cello: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 158D] Music Performance: Bass: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 158E] Music Performance: Guitar for Music Industry: Level 1***

Large group instruction. May be repeated for credit.

***[MUS 158F] Music Performance: Guitar: Level 1***

Individual instruction and master classes. May be repeated for credit.

***[MUS 159] Music Performance: Percussion: Level 1***

Individual or small group (2 or 3 people) instruction and master classes. May be repeated for credit.

***[MUS 187] Jazz Fundamentals***

Theoretical, aural and performance skills essential to the jazz lexicon with a particular focus on preparing the student for successful study in the areas of jazz improvisation, composition and arranging.

***[MUS 190] Topics in Music***

This is a topical course and may be repeated when the topic changes.

***[MUS 191] Diction***

Instruction for voice students in the proper pronunciation of English, Liturgical Latin, Italian, German and French for solo song and choral singing. Introduction to the International Phonetic Alphabet for notation of speech sounds.

***[MUS 197] Independent Study***

Directed study of particular topics in music agreed upon by instructor and student.

***[MUS 207A] Music Theory III***

Studies in chromatic tonal harmony concepts of the Classic and Romantic Periods and a study of musical forms through analysis.

***[MUS 207B] Aural Skills III***

Continued work in the areas of sight singing (solfege), transcription (dictation), error detection and rhythmic drills focusing more on chromatic harmonic and melodic concepts.

***[MUS 208] Theory and Ear Training IV***

Studies in compositional techniques of the 20th and 21st centuries through analysis and imitative composition projects. From modality to sound mass, students will study important scores and write compositions in important styles of the period.

***[MUS 215] History of Jazz***

Designed for non-majors. A survey of the development of jazz from its roots through the contemporary period. Emphasis will be placed on stylistic changes. Music 111 is recommended as a preliminary course. MnTC Goal 6.

***[MUS 217] Pop/Rock Music for Non-Majors***

Designed for non-majors. Survey of pop/rock music from 1956 to the present. Emphasis placed on identifying styles and songwriting techniques of various musicians.

***[MUS 231] Methods for Teaching Woodwinds I***

Methods and materials for teaching individual woodwind instruments in the public schools. Focus on clarinet and saxophone.

***[MUS 232] Methods for Teaching Woodwinds II***

Methods and materials for teaching individual woodwind instruments in the public schools. Focus on flute, oboe, and bassoon.

***[MUS 233] Methods for Teaching Brass Instruments***

Methods and materials for teaching individual brass instruments in the public schools.

***[MUS 234] Methods for Teaching String Instruments***

Methods and materials for teaching individual string instruments in the public schools.

***[MUS 235] Methods for Teaching Percussion***

Methods and materials for teaching individual percussion instruments in the public schools.

***[MUS 236] Guitar and Recorder for Teaching Music***

Fundamentals of guitar and recorder playing for use in the general music programs in the public schools.

***[MUS 240] American Music***

Historical survey of music in the United States, including folk, popular and art music of the African American, Latino, Native American and European traditions. MnTC Goal 6 and 7.

***[MUS 254] Music Performance: Voice: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 255A] Music Performance: Piano: Level 2***

Individual instruction and master classes. May be repeated for credit. Students must complete the piano proficiency exam prior to enrolling in this class.

***[MUS 255J] Jazz Piano***

Individual instruction and master classes. Students must complete the piano proficiency exam prior to enrolling in this class. May be repeated for credit.

***[MUS 256A] Music Performance: Trumpet: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 256B] Music Performance: Horn: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 256C] Music Performance: Trombone: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 256D] Music Performance: Euphonium: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 256E] Music Performance: Tuba: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 257A] Music Performance: Flute: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 257B] Music Performance: Oboe: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 257C] Music Performance: Clarinet: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 257D] Music Performance: Bassoon: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 257E] Music Performance: Saxophone: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 258A] Music Performance: Violin: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 258B] Music Performance: Viola: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 258C] Music Performance: Cello: Level 2***

Individual instruction and master classes. May be repeated for credit.



***[MUS 258D] Music Performance: Bass: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 258E] Music Performance: Guitar for Music Industry: Level 2***

Large group instruction. May be repeated for credit.

***[MUS 258F] Music Performance: Guitar: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 259] Music Performance: Percussion: Level 2***

Individual instruction and master classes. May be repeated for credit.

***[MUS 287] Commercial/Jazz Theory***

Basic principles of theory as they apply to commercial, jazz and other popular music forms. Chord/scale relationships, beginning solo transcription, rhythm section notational concepts, basic two-part melodic harmonization skills.

***[MUS 290] Topics in Music***

This is a topical course in music and may be repeated when the topic changes.

***[MUS 297] Independent Study***

Directed study of particular topics in music agreed upon by instructor and student.

***[MUS 300] Basic Conducting***

Development of fundamental conducting technique, score reading and group leadership skills.

***[MUS 303] History of Western Music to 1750***

Historical survey of Western art music of the Medieval, Renaissance and Baroque periods of music history with focus on styles, genres and historical context.

***[MUS 304] History of Western Music since 1750***

Historical survey of Western art music traditions of the Classical, Romantic and Modern periods with a focus on styles, genres and historical context.

***[MUS 307] Theory and Ear Training V***

This course will focus on set theory, 12 tone/serial music, centric strategies, parametric analysis, and perceptual analysis.

***[MUS 316] World Music Survey***

An introduction to the varied music repertoires of the world. Similarities to and differences from Western musical culture will be noted, as well as cross influences between the repertoires. MnTC Goal 8.

***[MUS 319] Music for Classroom Teachers***

Basic musicianship skills and theory developed through vocal, keyboard, and recorder experiences. Examination of teaching methods and materials, learner outcomes and assessment. Required for elementary education majors. Not intended for music majors or minors.

***[MUS 324] Musical Theatre History***

Musical Theatre productions past and present are examined and critically evaluated. An analysis of the various forms of musicals with an emphasis on the libretto, lyrics, and production elements. Same as THTR 324.

***[MUS 328] Ensemble Performance***

Required for music majors. Preparation and public performance of musical works appropriate for the specific ensembles listed: Concert Band, Festival Mixed Choir, Festival Women's Choir, Wind Ensemble, Jazz Ensemble, Concert Choir, Chamber Singers, Vocal Jazz Ensemble, Orchestra, Collegium Musicum (Early Music), Opera Workshop, Tri-College Percussion Ensemble, Small Commercial Ensemble, Jazz Combo, New Music Ensemble, and Chamber Music. (All ensembles require audition except Concert Band, Festival Mixed Choir and Festival Women's Choir.)

***[MUS 333] Teaching General Music K-12***

Administration of the public school K-12 general music curriculum. Study of teaching methods and materials, learner outcomes and evaluation procedures. Required of both vocal and instrumental education majors. The course must be taken no more than three semesters before the student teaching semester.

***[MUS 334] Secondary School Choral Methods and Literature***

Administration of the high school vocal music program. Study of objectives and evaluation procedures, teaching methods and materials, and repertoire. This course must be taken no more than four semesters before the student teaching semester.

***[MUS 335] Secondary School Instrumental Music Methods and Literature***

Administration of the public school band and orchestra program. Study of objectives and evaluation procedures, teaching methods and materials. In addition to the listed prerequisite of MUS 300, students must complete any three of these courses (MUS 231, 232, 233, 234, or 235) prior to enrollment in MUS 335.

***[MUS 344] History of European Art Music since 1700***

Historical survey of European art music of the Baroque, Classical, Romantic and Modern periods with a focus on styles, genres and historical context.

***[MUS 345] Women in Musical Culture***

A history of women in musical culture and critical examination of representations of women in music. Topics examine women's roles in American and European musical cultures, including artistic traditions, popular musics, jazz and folk traditions. Representations of women in musical forms, such as opera, rock music and multimedia, are also considered. MnTC Goals 6 and 7.

***[MUS 346] Sex, Sexuality and Music***

This course considers representations and expressions of sex and sexuality in music throughout history in artistic and popular music traditions in Western society. Various musical forms will be considered in sociohistorical context. Musical works will be examined and interpreted for their expression of ideas about sexuality, representations of sexuality, and the ways in which they enhance or challenge social norms or stereotypes about sexuality. Music as a means of expressing sexuality will also be considered. MnTC Goals 6 and 7.

***[MUS 354] Music Performance: Voice: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 355A] Music Performance: Piano: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 355J] Jazz Piano***

Individual instruction and master classes. May be repeated for credit.

***[MUS 356A] Music Performance: Trumpet: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 356B] Music Performance: Horn: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 356C] Music Performance: Trombone: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 356D] Music Performance: Euphonium: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 356E] Music Performance: Tuba: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 357A] Music Performance: Flute: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 357B] Music Performance: Oboe: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 357C] Music Performance: Clarinet: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 357D] Music Performance: Bassoon: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 357E] Music Performance: Saxophone: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 358A] Music Performance: Violin: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 358B] Music Performance: Viola: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 358C] Music Performance: Cello: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 358D] Music Performance: Bass: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 358F] Music Performance: Guitar: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 359] Music Performance: Percussion: Level 3***

Individual instruction and master classes. May be repeated for credit.

***[MUS 370] Composition***

Exploration of compositional techniques in all idioms and styles. Projects are individualized to meet the needs and desires of each participant.

***[MUS 372] Commercial/Jazz Arranging***

Small group writing in four and five parts. Arranging for the large jazz ensemble (big band). Writing for strings and voices in a commercial/jazz context. Writing background arrangements for vocalists.

***[MUS 373] The Art and Craft of Popular Songwriting***

Through listening, analysis, creative exercises, and peer critiques, this course will provide students immersion in both the theory and practice of writing popular songs.

***[MUS 374] Instrumental/Choral Arranging***

Approaches to writing for instruments of the band and orchestra as well as writing for choral ensembles. Ranges, transpositions and scoring for ensembles of various sizes. Substituting instruments to fit individual needs. Writing for voices with a focus on ranges, sensible rhythmic handling of lyrics.

***[MUS 378] Advanced Conducting***

Advanced band, orchestra and choral conducting techniques, rehearsal methods, and score reading.

***[MUS 387] Commercial/Jazz Improvisation***

Development of approaches to melodic improvisation, guide tone exploration, and bebop “language. Continued stylistic investigation of different types of commercial and jazz music. Enhanced transcription techniques and aural skills.

***[MUS 390] Topics in Music***

Special upper division studies in music. Different topics will be chosen for study. May be repeated if topic changes.

***[MUS 397] Independent Study***

Directed study of particular topics in music agreed upon by instructor and student.

***[MUS 432] Voice Pedagogy***

Will include physiology, anatomy, teaching techniques, demonstration models and a practicum.

***[MUS 450] Student Recital***

Special supplemental applied study in preparation for public recital appearance. May be repeated once for credit. Students must pass the piano proficiency examination prior to enrolling in this course.

***[MUS 454] Music Performance: Voice: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 455A] Music Performance: Piano: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 455J] Jazz Piano***

Individual instruction and master classes. May be repeated for credit.

***[MUS 456A] Music Performance: Trumpet: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 456B] Music Performance: Horn: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 456C] Music Performance: Trombone: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 456D] Music Performance: Euphonium: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 456E] Music Performance: Tuba: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 457A] Music Performance: Flute: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 457B] Music Performance: Oboe: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 457C] Music Performance: Clarinet: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 457D] Music Performance: Bassoon: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 457E] Music Performance: Saxophone: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 458A] Music Performance: Violin: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 458B] Music Performance: Viola: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 458C] Music Performance: Cello: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 458D] Music Performance: Bass: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 458F] Music Performance: Guitar: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 459] Music Performance: Percussion: Level 4***

Individual instruction and master classes. May be repeated for credit.

***[MUS 469] Internship***

Internship in music-related field. Students must pass the piano proficiency examination prior to enrolling in this course. A maximum of 12 internship credits may be applied to the degree.

***[MUS 472] Jazz Arranging II***

A continuation of MUS 372. Writing for five-part ensemble with rhythm section and for larger ensembles (big band, vocal jazz ensemble and studio orchestra).

***[MUS 490] Topics in Music***

This is an upper division topical course in Music and may be repeated when the topic changes.

***[MUS 492] Senior Capstone/Thesis***

Senior capstone focused on the development and completion of the senior thesis and, as appropriate, public presentation of the results of the thesis. May be repeated for credit for up to 3 credits.

***[MUS 497] Independent Study***

Directed study of particular topics in music agreed upon by instructor and student.

## **Nursing**

***[NURS 301] Transitions***

As the first course for RNs who are pursuing a baccalaureate degree, this course provides an overview of the evolution of nursing as a profession. Students are oriented to the role of being scholar-clinicians. The course supports an evolving professional identity and examines major issues and trends in contemporary nursing. Students will explore critical abilities in professional practice such effective communication, working in groups, teaching-learning, and more. The prevailing focus of analysis is quality and safety for the care of individuals, groups, and families. This course is a prerequisite for all other courses in the nursing major for RN-BSN

students. Optional co-requisites are NURS 303L (Family Health Nursing), NURS 342 (Care of Diverse Populations), and/or NURS 370 (Research and Evidence-Based Practice).

### ***[NURS 303L] Family Health Nursing***

This course emphasizes nursing care of the diverse family unit across life stages and care settings. Family focused care that is theory driven and evidence informed guides students in developing holistic, health promoting, culturally sensitive approaches to care. In addition, promotion of critical thinking and effective, therapeutic communication and collaborative practices are emphasized in the care of families.

### ***[NURS 318] Nursing Ethics***

This course is designed to assist students in the exploration and recognition of ethical issues within the profession of nursing. Students will gain knowledge and gain critical thinking skills through that application of ethical theories and paralleling of situations to various benchmarks within the nursing profession (i.e. Association of American College's of Nursing Baccalaureate Essentials, Bachelor of Science in Nursing Program Outcomes, American Nurses Association Code of Ethics, Minnesota Board of Nursing Scope of Practice).

### ***[NURS 342] Nursing Care of Diverse Populations***

This course supports the advancement of patient-centered care with the imperative that nurses impact the profound disparities in health status and health care, both nationally and globally. Students will examine what is meant by culture and the ways that culture intersects with health issues. Ultimately, the focus is that professional nurses are committed to advocating for safe quality care to all, congruent with the tenets of social justice, human rights, and bound to nursing's Code of Ethics.

### ***[NURS 348L] Public Health Nursing***

This on-line course combines the theory base with clinical experiences in nursing care to complex systems and aggregates in the community. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease.

### ***[NURS 352] End of Life Nursing Care***

This on-line course addresses critical aspects of palliative end-of-life nursing care. The course is based on the End-of-Life Nursing Education Consortium (ELNEC) curriculum.

### ***[NURS 370] Nursing Research and Evidence-Based Practice***

This course is grounded in the translation of current evidence into best practice. The research process links nursing theory with clinical nursing practice for application within the larger healthcare system. Emphasis is placed on preparing students to retrieve, read and comprehend published research reports. A systematic approach to appraisal of research evidence is emphasized as a means of informing nurses' clinical decision making and is incorporated into a research critique. Students develop an evidence based practice project as well as explore evidence-based practice models to facilitate implementation and dissemination.

### ***[NURS 390] Topics in Nursing***

This is a topical course and may be repeated when the topic varies.



### ***[NURS 409] Pharmacology for Nurses***

This course will provide students with an expanded knowledge base needed to safely monitor and evaluate response to medications for clients of all ages. Students will learn the basics of pharmacokinetics and pharmacodynamics. Actions, indications, interactions, side effects, nursing implications, and client education for select major drug groups are addressed.

### ***[NURS 420L] Gerontological Nursing to Promote Successful Aging***

This course explores the experience and challenges of aging from the perspective of the patient, the support system, the community, and the health care system. Factors and processes that are both contributors and barriers to successful aging and quality of life for older adults are identified. Various assessment tools and strategies for delivering evidence-based care will be considered that enhance quality of life for the older adult in both health and disease states.

### ***[NURS 450] Applied Pathophysiology***

This course focuses on alterations of selected physiological functions that occur in response to a disease process, or compensate for common stressors like inflammation or pain. The content builds upon previous understanding of anatomy, physiology, microbiology, basic chemistry, and the usual manifestations of common diseases. Using a systems theory framework, pathophysiological functions of cells and the interrelationships of body units are explored. Physiological theory and treatment implications are presented in video lecture format. Students demonstrate application of content by applying concepts of pathophysiology to clinical problems.

### ***[NURS 472] Leadership and Professional Development***

This course provides students with the opportunity to explore leadership theories and behaviors that will serve as a foundation for career-long professional development. The course focuses on: (a) leadership, (b) professionalism, (c) communication and relationship building, (d) knowledge of the healthcare environment and (e) developing business skills. It integrates concepts of management, decision making, and more to prepare students for current professional nursing practice as leaders and change agents. Emphasis is placed on the critical role of the nurse leader in promoting a collaborative, interdisciplinary approach to the delivery of high quality, safe and accessible healthcare to diverse populations across healthcare settings.

### ***[NURS 473L] Professional Pathways***

In this senior capstone, writing intensive course, the student addresses a quality improvement issue using evidence based practice recommendations in a student led project. The student investigates a problem or issue in practice, reviews best evidence and translates that best evidence into a sustained change to enhance quality and safety in care. Emphasis is placed on the nurse as a healthcare leader and the development of leadership skills including project management, decision-making, problem solving, critical thinking, and evaluation. Baccalaureate nursing graduate outcomes are synthesized as students complete their undergraduate nursing coursework.

### ***[NURS 490] Topics in Nursing***

Study of selected practices, issues and/or problems in health care delivery as they impact the consumer and the nursing profession. Topics change each semester. This course may be repeated when the topic changes.

***[NURS 497] Independent Study***

Individual intensive study, clinical project or research activity of a nursing issue under guidance of a faculty member. Extends intellectual pursuit beyond regular curriculum.

**Operations Management**

***[OM 201] Introduction to Professional Selling***

This course will provide students with the opportunity to better understand what a professional selling career actually looks like. This course will explore the realities and myths of selling related careers and help make apparent the possibilities that might exist for professionals in a variety of industries, types of organizations, and different customer contexts. Students will be able to not only hear from professors who have experience in selling but also from professionals currently in the field working with customers and prospects.

***[OM 380] Methods Improvement***

Study and analysis of productive and non-productive work elements for the purpose of productivity improvements and establishing time standards.

***[OM 390] Topics in Operations Management***

Topics in Operation Management - may be repeated when the topic varies.

***[OM 393] Occupational Safety and Health***

Designed for students to develop an understanding of basic occupational safety and health terminology, principles, and practices. Course content covers both industrial and construction settings and reflects current occupational standards. Students will be exposed to the development of a safety program and will do a safety site visit off-campus.

***[OM 395] Computer Applications for Technologists***

The stand alone and integrated application of computer software tools such as spreadsheets, word processors, database management systems, graphics and other productivity software, to problem solving contexts specific to the disciplines of technology.

***[OM 401] Professional Selling Practicum***

This course will provide students with the opportunity to put into practice selling related principles explored as part of their previous classes, job shadowing opportunities, and/or practical opportunities where they could demonstrate their selling acumen.

***[OM 469] Internship***

Through industry cooperation, formal instruction is supplemented with a practicum conducted on site with a host business, helping students learn the necessities for successful careers in distribution and manufacturing. Maximum of 12 credits may be applied to the graduation requirement.

***[OM 470] Purchasing and Sourcing Management***

This course covers the tools, techniques and approaches used for managing the procurement and sourcing processes. Topics such as cost analysis, price analysis, negotiations, contract management will be discussed using lectures, industry experts and case studies.

***[OM 472] Logistics Management and Network Design***

Supply chain management and strategic logistics management address many of the same areas and topics. The overarching goal here is to address the design, control, operation and management of supply chain systems. Topics that are addressed include logistics trade-offs, inventory management, logistics network planning, distribution systems, customer value, the value of information, and supply chain procurement outsourcing.

***[OM 482] Quality Management***

Focusing on expanded managerial philosophies and techniques of quality control including the comprehensive treatment of quality management and control issues. This course provides practical applications of management theory by balancing managerial and technical material.

***[OM 483] Cost Analysis***

The objectives of the course are to analyze cost behavior and to develop and interpret financial information at the process, project, and organization levels for purposes of management decision making.

***[OM 485] Production Inventory Management***

Study and analysis of systems and methods for planning and control of manufacturing resources. The framework of this course is based on the guidelines provided by the American Production and Inventory Control Society. Main topics include master planning, inventory management, material and capacity requirements planning, production activity control, and Just-In-Time.

***[OM 490] Topics in Operation Management***

Individual study not offered in depth in the regular curriculum. Maximum of 4 credits applied to graduation.

**Paralegal**

***[PARA 125] Introduction to Paralegal***

Provides an overview of the paralegal profession and the legal system to assist students in their career decision making process.

***[PARA 201] You and the Law***

To acquaint students with basic information about how their lives will be impacted by the law in numerous areas including marriage, death, employment, retirement, property ownership, consumer status, personal injury and criminal law. This course is open to all students. MnTC Goal 9.

***[PARA 251] Legal Research and Writing***

Introduction to legal research and analysis. Students will develop skills in legal issue identification, analysis and research through progressively more complex exercises, including preparation of a case brief, legal memorandum and a correspondence project. Paralegal majors must earn a "C-" or better in this course.

***[PARA 310] Civil Procedure I***

The substantive and procedural law of civil litigation, with emphasis on the Rules of Civil Procedure, in both state and federal court systems.

***[PARA 320] Family Law***

The law of domestic relations, including marriage, separation, divorce, annulment, adoption, custody, and other topics.

***[PARA 321] Employment Law***

An exploration of the legal nature of the employment relationship including contract and liability issues and major stages of the employment relationship, including hiring, evaluation and termination. Coverage includes antidiscrimination law and the Family and Medical Leave Act.

***[PARA 325] Interviewing***

Development of the skills necessary to elicit comprehensive factual information about legal issues and to assist the client in understanding the process and procedures of the legal system.

***[PARA 331] Debtor-Creditor and Bankruptcy Law***

The study of law relating to the extension of credit, collection of debts, debtors' and creditors' rights, and bankruptcy, including liquidation, business reorganizations, and adjustment of debts.

***[PARA 346] Public Benefits***

A study of the substantive and procedural law of government benefit programs, including Supplemental Security Income, workers compensation, unemployment compensation, and Social Security Retirement and Disability insurance.

***[PARA 350] Contract Law and Drafting***

A study of the law of contracts, including elements of formation, duties of parties to contracts, discharge of parties to a contract and enforcement of contracts, including the ability to perform legal research relevant to contract law, perform critical analysis of various contract issues, negotiation of contract terms, and the ability to draft various components of contracts as they relate to industry, consumer relationships, and daily living.

### ***[PARA 375] Legal Ethics***

The study of law governing the professional ethics of attorneys with emphasis on the Rules of Professional Conduct and their implications for paralegals.

### ***[PARA 380] Real Property Law***

The law dealing with interests in, ownership and leasing of, and title to real estate. Emphasis is also placed on official descriptions, systems for recording, and procedures and documents used for the sale or transfer, lease, and zoning of real property.

### ***[PARA 390] Topics in Paralegal Studies***

This is a topical course and topics covered may vary. The course is repeatable when the topic varies.

### ***[PARA 405] Wills, Estates and Taxation***

A study of the procedures, documents and other techniques used in the planning for transfer of property after death, administration of estates and the preparation of will, probate documents and an estate tax return.

### ***[PARA 410] Civil Procedure II***

A study of the procedures, documents and other techniques used in a legal setting emphasizing trial practice. Topics included will be case intake, discovery, negotiations, trial preparation, trial practice and post judgment relief.

### ***[PARA 416] Elder Law***

A study of the various public benefits programs that provide economic maintenance and financing of health care for the elderly, including medical assistance and Medicare. Special concerns in legal representation of the elderly. An exploration of the laws regarding self-determination and planning for incapacity.

### ***[PARA 420] Criminal Litigation***

A practice-oriented study of the procedures, documents, and techniques in criminal law cases. Emphasis on the preparation, organization, and management of criminal litigation documents and materials; discovery; interviewing and investigation; trial preparation; assistance at trial and other proceedings; and post-conviction relief.

### ***[PARA 425] Advanced Legal Research and Writing***

Integration and application of methods and techniques of legal research and writing, building on and supplementing skills acquired in PARA 251. Preparation of complex multiple-issue legal memoranda and briefs.

### ***[PARA 435] Personal Injury***

A study of the procedural and substantive law of personal injury, including negligence, products liability, strict liability, and insurance.

### ***[PARA 469] Internship***

Internship experience under supervision of an attorney as approved by program internship coordinator. Students must complete the prerequisites and two courses from your area of emphasis prior to enrolling in PARA 469. A maximum of 12 internship credits may be applied to the degree.

### ***[PARA 470] Government Benefits***

This course will provide non-paralegal majors with a brief overview of a variety of federal and state public assistance health care and income maintenance programs including: Social Security, Supplemental Security Income, Supplemental Nutrition Assistance Program, Temporary Assistance to Needy Families, Minnesota Family Investment Program, Medical Assistance, Medicare, and North Dakota's Training, Education, Employment and Management. (Non-paralegal majors only.)

### ***[PARA 497] Independent Study***

Individual research or study under supervision of program director or other approved faculty. Students must have completed at least one methods course prior to enrolling in PARA 497.

## **Philosophy**

### ***[PHIL 101] Introduction to Western Philosophy***

An introduction to Western philosophical thinking and methods through an examination of selected figures and movements from the history of the discipline. MnTC Goal 6.

### ***[PHIL 102] Philosophies of Human Nature***

This course examines multiple philosophical ideas about human existence. In addition to exploring culturally distinct perspectives, we will explore normative consequences and applications regarding basic obligations and attitudes towards others, the environment, and values. Topics typically include Confucianism, Hinduism, Buddhism, Christianity, Existentialism, Aristotleanism, Kantianism, and secular humanism. MnTC Goal 6 and 7.

### ***[PHIL 110] Practical Reasoning***

An introduction to critical thinking, with emphasis on understanding the logic of everyday arguments, interpreting the arguments of others, detecting fallacies, and constructing good arguments. MnTC Goal 2.

### ***[PHIL 120] World Religions***

Study of beliefs and practices of major religions of the world. MnTC Goal 6 and 7.

### ***[PHIL 215] Contemporary Moral Issues***

Application of ethical theories to contemporary moral issues, such as world hunger, punishment, sexual equality, sexual behavior, abortion, the environment, corporate responsibility, and war. MnTC Goal 6 and 9.

### ***[PHIL 235] Philosophy of Sex and Love***

Exploration of historical and contemporary sources. Topics may include the nature of sexual acts, perversion, homosexuality, sexual ethics, fantasy, pornography, marriage, the different types of love, and feminist views on sex and love. MnTC Goal 6 and 7.

***[PHIL 290] Topics in Philosophy***

Topics will be announced in class schedule. Students may register more than once when content varies.

***[PHIL 300] History of Ethics***

A history of ethical and political theory in Western philosophy. The course will study the works of such philosophers as Plato, Aristotle, Augustine, Locke, Hobbes, Kant, Bentham, and Mill.

***[PHIL 301] Philosophy of Religion***

An examination of religions from a philosophical standpoint. The course will discuss such issues as the existence and nature of God, religious experience, and life after death.

***[PHIL 302] Buddhist Philosophy***

This course explores the most fundamental issues in Buddhist philosophy that have shaped the way of life and thoughts of Buddhists for 25 centuries. Topics include Buddhist conceptions of reality, empty persons, ethical relationships, the doctrine of emptiness, Buddhist epistemology, and Zen. MnTC Goal 6 and 8.

***[PHIL 303] Classical Philosophy***

A study of the development of ancient Greek and Roman philosophy, including the Presocratics, Socrates, Plato, Aristotle and such movements as Stoicism, Epicureanism, and Skepticism. Prerequisites: or consent of instructor.

***[PHIL 304] Medieval Philosophy***

Study of Western philosophy during the medieval period. The course will typically include study of such philosophers as Augustine, Anselm, and Aquinas, as well as philosophers from the Jewish and/or Islamic tradition.

***[PHIL 305] Modern Philosophy: 17th Century***

Study of Western philosophy in the 17th century, focusing on the metaphysical and epistemological writings of Descartes and Locke. Prerequisites: Students should have taken at least two courses in philosophy or obtain consent of instructor. Prerequisites: or consent of instructor.

***[PHIL 306] Modern Philosophy: 18th Century***

Study of Western Philosophy in the 18th century, focusing on the metaphysical and epistemological writings of Hume and Kant.

***[PHIL 307] 19th Century Philosophy***

Study of selected major philosophers of the 19th century, such as Hegel, Marx, Kierkegaard, Nietzsche, Schopenhauer and Mill.

### ***[PHIL 308] Anglo-American Analytic Philosophy***

A survey and examination of the fundamental issues of analytic philosophy that have shaped the contemporary philosophical landscape of Anglo-American societies. Topics covered will include Early Cambridge Analytic Philosophy, Logical Positivism of the Vienna Circle, Oxford Ordinary Language Philosophy, and Contemporary Analytic Philosophy. Readings will be selected from among the areas of philosophy of language, epistemology, philosophy of science, philosophy of mind, and metaphysics. Students should have taken at least two previous course in philosophy or obtain the consent of the instructor.

### ***[PHIL 309] Continental Philosophy***

An investigation of recent trends in European philosophy: areas may include phenomenology, structuralism, post-structuralism, critical and political theory, postmodernism, French feminism. Emphasis will be on how the continental philosophers revolutionize the classic philosophical notions of the self, world, rationality, knowledge, etc.

### ***[PHIL 311] Morals and Medicine***

A consideration of some moral problems that arise in medicine such as truth-telling, experimentation, paternalism, abortion, euthanasia, allocation of sparse resources and health care systems. MnTC Goal 6 and 9.

### ***[PHIL 312] Business Ethics***

This course explores the ethical challenges that arise in the business world. The course will begin with a discussion of different normative theories and then applies those theories to areas of concern within the business world. Case studies will be used to illustrate theoretical points with particular situations. This course will develop critical thinking competencies. MnTC Goal 6 and 9.

### ***[PHIL 316] Ethics in the Information Age***

An introduction to ethical issues associated with the Information Age. A description of what the Information Age is, how it came to be, and what makes it different from the previous age. Students will study new ethical issues arising from, or given increased prominence by, the Information Age, advances in information collection, storage, retrieval, processing, and dispersion. Ethical issues to be covered include privacy, surveillance, accuracy, free speech, intellectual property, Internet crime, identity theft, spam, information access, information dispersion, and some consequences of data mining and emerging technologies. A significant portion of the assignments in the course require both formal and informal writing. It is critical that learners can express themselves in writing, expressing their views on ethical issues that continue to develop as new technologies emerge. Since the course is online, written work will be emphasized as shown: • Weekly written discussions using an online discussion forum and our class wiki (4-5 discussions per week). You are required to respond to at least one other posting from a member of your group for EACH discussion. • Weekly “polls” (3 per week – an article related to current technological developments will be posted, and a reflection about the ethical considerations will be required.) • Persuasive Paper (Each week, one of the required sections of the paper will be handed in as a draft. Feedback will be provided on each draft. The revised (complete) paper is due the last week of the course. Cross listed with CSIS 316 MnTC Goal 9



### ***[PHIL 318] Professional Ethics***

The course explores the special ethical challenges that arise in professional life. The course is organized around issues common to many professions, such as competing rights, informed consent, professional obligation, and confidentiality. The course provides an overview of different normative theories and applies them to areas of concern that frequently arise in professional decision making. Case studies illustrate these issues. This course develops critical thinking and writing competencies. MnTC Goal 9.

### ***[PHIL 319] Ethics in the Professions***

The course explores the special ethical challenges that arise in professional life. The course is organized around issues common to many professions, such as competing rights, informed consent, professional obligation, and confidentiality. The course provides an overview of different normative theories and applies them to areas of concern that frequently arise in professional decision making. Case studies illustrate these issues. This course develops critical thinking and communication competencies. MnTC Goals 6 and 9.

### ***[PHIL 320] Philosophy of the Arts***

A consideration of philosophical questions relating to the fine arts. Representative topics include the nature of art, aesthetic experience, criticism in the arts, representation, symbolism, and evaluation. Same as ART 320. MnTC Goal 6.

### ***[PHIL 322] Religious Traditions in our Global Society***

Examination of how the five major world religious traditions-Hinduism, Buddhism, Judaism, Christianity, Islam-interact with each other in our contemporary pluricultural world. Emphasis on how they diversely, and divergently, influence and inspire their practitioners in our 21st century global society. MnTC Goal 6 and 8.

### ***[PHIL 335] Death and Dying***

Everybody dies. But is that a bad thing? Going back to Epicurus, philosophers have argued about this question. The implications should be obvious: if death isn't a bad thing, then what do we say about murder, war, suicide, and end of life issues? On the other hand, if death is bad, what makes it so? In this class, we will consider questions about what life is and what death is, what impact on life's meaning death has, whether death is bad or not, and how our answers to these questions will impact our thinking about procreation, suicide, and killing others. MnTC Goal 6 and 9.

### ***[PHIL 340] Symbolic Logic***

A survey of deductive logic, emphasizing the use of symbolism to interpret and evaluate arguments. Includes propositional and predicate logic. MnTC Goal 4.

### ***[PHIL 355] Existentialism***

An examination of writings--both philosophical and literary-- of representative existentialists, such as Nietzsche, Kierkegaard, Dostoevsky, Heidegger, Sartre, and Camus.

### ***[PHIL 357] Social and Political Philosophy***

Investigation of major issues of contemporary social and political philosophy. Topics may include the justification of the state, rights, equality and liberty, the major political ideologies, feminist politics, and critical theory. Listed prerequisites may be waived by prior completion of a 200 or 300 level philosophy course.

***[PHIL 358] Peace and War***

War affects people around the globe, both when their nation is at war and when allies of their nation are at war. By studying the writings of people from different cultures and nations, we will examine both the causes of war and alternatives. During this class we will have occasion to question whether war is ever moral and whether there are any viable alternatives to war that might allow for more peaceful resolutions of conflict. We will finish the semester with a discussion of terrorism and how it should affect our beliefs about some of these issues. MnTC Goal 6 and 8.

***[PHIL 390] Topics in Philosophy***

Topics will be announced in semester class schedules. Students may repeat course when content varies.

***[PHIL 407] Theory of Knowledge***

Study of basic problems of theory of knowledge (epistemology) and discussion of contemporary epistemological theories. Topics will include the analysis of knowledge, epistemic justification, foundationalism, coherentism, reliabilism, traditional versus naturalistic epistemology, and skepticism. Course requires an oral presentation. Students should have taken at least two courses in philosophy or obtain the consent of the instructor.

***[PHIL 408] Metaphysics***

Study of major issues of contemporary metaphysics. Cover topics such as substance and properties, identity and persistence, necessity and possibility, essence and essentialism, causation and determinism, and ontology. Course requires an oral presentation. Students should have taken at least two courses in philosophy or obtain the consent of the instructor.

***[PHIL 483] Major Philosophers***

Intensive study of some important figure in the history of philosophy. Students may register more than once when content varies. Students should have taken at least two courses in philosophy or obtain the consent of the instructor.

***[PHIL 490] Topics in Philosophy***

Study of a selected philosophical problem or philosophical movement. Students may register more than once when topic varies. Specific topics will be announced in class schedules. Students should have taken at least two courses in philosophy or obtain the consent of the instructor.

***[PHIL 492] Senior Project***

As a capstone requirement for the major, students will complete a research paper with departmental presentation or submit a portfolio. A portfolio containing (1) four or five papers they have written for philosophy courses; (2) a philosophical self-assessment. See Department Chair for details.

### ***[PHIL 495] Topics in Feminist Theory***

Courses offered under this title will focus on feminist theories as frameworks for work on feminist issues. For specific topic see class schedule. Topics may include Knowledge, Ethics, Ecology, Reproductive Rights and Issues, Self-images and Identity, and Sexuality. Students may register more than once when content varies, but may not repeat the course for more than 6 credits.

### ***[PHIL 497] Independent Study***

Intensive independent study of a philosophical problem, major philosopher, or philosophical movement, under the direction and supervision of one or more members of the department. May be repeated to a maximum of 6 credits. No more than 3 credits may be used to fulfill the major requirements.

## **Photography**

### ***[PHO 201] Introduction to Film Based Photography***

This course introduces students to film based photography. Students learn camera functions, film exposure, gelatin silver based printing, fine tuning of images and image presentation. Emphasis is placed on personal vision and students understanding the relationships between the aesthetics, technical and conceptual concerns in photography. Students are also introduced to the history of photography and are required to draw relationships between their work and historic photographic works. This allows them to better understand their place in the contemporary photographic art world.

### ***[PHO 202] Basic Digital Imaging***

This course addresses aesthetic, conceptual and technical concerns in digital photography. Basic level Adobe Photoshop and other relevant software instruction will occur. It is important to note that this course is first and foremost about image making. The computer will be used as any other tool is used in the creation of art. An adjustable digital camera is required (small, medium or large format).

### ***[PHO 301] Intermediate Photography***

This course addresses aesthetic, conceptual and technical concerns in photography. Instruction includes darkroom experimentation with papers, toners, and films, experimentation with lighting techniques and new means of alternative digital image-making.

### ***[PHO 305] Photographic Lighting***

Photographers who work mainly on location and outdoors generally learn to treat light as a condition - something to be anticipated, assessed for its suitability, and exploited by various techniques. Moving into a studio, however, creates a fundamental change, not only in technique but also in attitude. The lighting is no longer a given condition, but one that is completely malleable. It is for the photographer to decide what lighting effect is desirable, and then to construct it. This course involves an intensive study into the techniques and applications of artificial and available light as it relates to still photography. Students are required to complete a series of technical and aesthetic photographic assignments.

### ***[PHO 350] Alternative Photographic Processes***

This course explores the world of historic and contemporary alternative photographic processes. Students learn a variety of processes that help expand their understanding and use in the syntax of photography.

### ***[PHO 351] Photographic Portraiture***

Many people, including photographers, have preconceived or set ideas of portraiture photography. Portraiture encompasses a wide array of styles and techniques that date back far before the advent of photography. This course will cover the proven methods of not only portrait photographers, but all artists who deal with the human portrait. Students will be encouraged to integrate proven techniques with original ideas in the development of their own personal vision.

### ***[PHO 352] Color Photography***

This course will explore the effective use of color and light as a creative means for visual communication. Students will take their own traditional or digital photographs and then utilize various digital photographic techniques, including image scanning and color digital printing. Color theory, correct exposure of color slide and negative films, use of color as an element in photographic design, and the psychology of color will be covered. Upon successful completion of the course, students will demonstrate learned concepts and observations specific to photographic image making, color theory and design.

### ***[PHO 353] Advanced Digital Imaging***

Students will continue to develop their creative conceptualization skills and practice using advanced-level techniques in Adobe Photoshop and Lightroom as they create a number of visually compelling images. Projects will address visual problem solving for commercial applications and digital imaging as an emerging medium in fine art. Students should have basic knowledge of Photoshop and design composition skills prior to registering for this course.

### ***[PHO 354] The Photograph as Narrative***

Exploration of photography as a device for telling stories, fictional and nonfictional. This course allows for further development and refinement of technical, conceptual and formal qualities and is designed so that the student can produce and prepare portfolio quality images addressing various conceptual concerns dealing with narrative aspects of photography.

### ***[PHO 355] Commercial Photography***

Emphasizing creative solutions to complex photographic problems, this course is for those interested in discovering the versatility and creative potential of the studio environment as it relates to the commercial world of photography. Students build upon skills developed in Basic Photographic Lighting, gaining a stronger understanding of both studio and location lighting. The course focuses on still life, food, fashion, product and editorial photography. Students are also introduced to professional studio practices and management.

### ***[PHO 356] The Photograph as Book***

This course revolves around the integration of photographic imagery with the book. Students will explore various bookmaking techniques and uses of photography in book form along with the history of the photo book.

### ***[PHO 357] Architectural Photography***

Documentation and exploration of architecture through the lens of the camera. Special attention is paid to framing and composition of buildings in the context of their surroundings. Instruction in medium and large format photography, lighting, and analog/digital darkroom techniques.

### ***[PHO 375] The History and Aesthetics of Photography***

This course examines the history and aesthetics of photography and the important role this medium of expression has held since its “discovery” in 1839. A chronological/genre approach to the exploration of this medium will be used to demonstrate the important contributions that this art form has made to the history of art. The use of photography as an expression of humanistic, religious, and social values will also be considered. Students will also explore the mixing of process with the history of the medium, developing a photographic project that is informed through their understanding of photographic history.

### ***[PHO 401] Photographic Portfolio Development I***

The Photographic Portfolio Development I course is designed so that the photography student can produce and prepare several mini portfolios of work in various areas of photographic specialization. Students are given various assignments to explore different topics. These can include, but are not limited to; fine art, commercial, documentary or portraiture. Emphasis is placed on technique, aesthetics, and conceptual concerns. This work is done with close supervision and mentoring from the photography faculty.

### ***[PHO 402] Photographic Portfolio Development II***

The Photographic Portfolio Development II course is the second in the portfolio development series. Photography students produce and present a portfolio of work based on an area of photographic specialization that will assist them in gaining employment or continuing their education. Photographic topics can include, but are not limited to; fine art, commercial, documentary or portraiture. Emphasis is placed on technique, aesthetics, and conceptual concerns. This work is done with close supervision and mentoring from the photography faculty. Work is contract based as agreed upon with the instructor.

### ***[PHO 450] Professional Business Practices in Photography***

This course addresses issues concerning photographers in the early years of their professional lives. It presents the career options and practical information they need. It explains structures and systems in the art and business worlds: the operation of art venues, funding, business issues, legal issues, etc.

## **Physical Education**

### ***[PE 100] Aerobic Dance***

This course provides instruction in the principles of aerobic exercise and requires participation in daily aerobic dance routines designed to develop aerobic fitness and rhythmic skills.

### ***[PE 101] Step Aerobics***

This course provides instruction in the principles of aerobic exercise using a step and requires participation in daily exercise routines designed to develop aerobic fitness.

### ***[PE 102] Weight Training I***

This course is designed for students who have limited weight training experience. Weight training principles, exercises, terminology, safety and etiquette are presented and students participate in a weight training program.

### ***[PE 103] Weight Training II***

This course builds on the basic weight training principles introduced in PE 102. Advanced weight training programs and systems are covered and implemented.

### ***[PE 104] Exercise and Body Development***

This course is designed to teach the knowledge, activities, and skills necessary to develop a comprehensive physical fitness program focusing on flexibility, strength and aerobic development.

### ***[PE 107] Personal Defense***

This course provides instruction in recognizing, avoiding, and responding to threats to personal safety. Personal defense terminology and multiple personal defense techniques involving physical contact and falling are emphasized.

### ***[PE 109] Walking Fitness***

Walking Fitness is an activity course designed to help participants learn about the benefits of walking, explain how walking can be a part of a safe and realistic fitness plan, and discuss how to maintain or improve their fitness level by walking.

### ***[PE 110] Skiing***

This course is designed for the beginning downhill skier. Students receive instruction in the terminology, equipment, etiquette, safety and basic skills of downhill skiing.

### ***[PE 112] Bowling***

This course is designed for the beginning bowler. Students receive instruction in the basic skills of bowling, terminology, rules, strategy and scorekeeping.

### ***[PE 114] Golf***

This course is designed to improve the beginning golfer's skills and knowledge of rules, terminology, equipment, etiquette and strategy in golf.

### ***[PE 116] Tennis I***

This course is designed for the beginning tennis player. It focuses on developing ground strokes, the serve, and understanding of tennis terminology, rules, etiquette and basic singles and doubles strategies.

### ***[PE 120] Tae Kwon Do I***

Tae Kwon Do is a 2,000 year old Korean style of martial arts. Students are introduced to the various kicks, blocks, combinations, one steps, and self-defense techniques that make Tae Kwon Do the most popular form of self-defense in the world.

***[PE 124] Badminton***

This course is designed to teach students basic skills in badminton. Instruction focuses on strategies and rules used in both singles and doubles competitions.

***[PE 130] Volleyball I***

This course is designed for students who have limited volleyball experience. Instruction and practice focuses on the pass, overhead pass, serve, spike, rules, terminology and basic offensive and defensive match play.

***[PE 132] Basketball***

This course is designed for the beginning basketball player. Students learn the fundamentals of basketball including passing, shooting, dribbling, rebounding, defense and strategy.

***[PE 134] Soccer***

This course is designed to provide instruction, practice, and performance opportunities in the basic soccer skills and techniques. Rules, responsibilities of players, team play, and strategies are also covered.

***[PE 136] Pilates***

This course offers comprehensive physical instruction on the pilates method of total body conditioning. This class will cover foundational pilates exercises, cardio pilates, and yogalates styles. This class is designed to increase flexibility and strength, while improving posture and balance. No prior experience necessary.

***[PE 137] Yoga I***

This course is designed to teach students the fundamentals of hatha yoga. Each class will cover different physical and philosophical aspects of yoga. This class requires daily active participation along with reading, course work, and discussion. No prior yoga experience necessary.

***[PE 139] Cardio Salsa***

Aerobic activity strengthens the heart and lungs, lowers total cholesterol, decreases stress, reduces the risk of some diseases and improves quality of life. The cardio classes provide you with all the benefits of aerobic activity in a fun and supportive group setting.

***[PE 140] American Round and Square Dancing***

This course provides instruction and practice in the basic movements of square dance as outlined by the Sets in Order American Square Dance Society.

***[PE 141] Folk Dance***

Students learn basic folk dance movement patterns including the two step, schottische, walk, polka, and grapevine as they are used in a variety of dances from different cultures.

***[PE 144] Ballroom Dance***

Students will learn the basics of leading and following techniques as well as be introduced to swing, waltz, two step and Latin dance.

***[PE 160] Swimming I***

This course is designed for the student to learn basic water safety skills and knowledge in order to make him/her safe in the aquatic environment.

***[PE 190] Topics in Physical Education***

This is a topical course in fundamental activities. The course may be repeated if content varies.

***[PE 191] Activities Course: Dance***

Designed for physical education majors, this course develops skills and knowledge in folk, square, and ballroom dance.

***[PE 192] Activities Course: Gymnastics***

Designed for physical education majors, this course develops skills and knowledge of rules, terminology, and a practical experience to assist with teaching gymnastics.

***[PE 193] Activities Course: Elementary School***

Designed for physical education majors, this course introduces the student to the elementary school curriculum.

***[PE 194] Activities Course: Non-Traditional***

Designed for physical education majors, this course develops skills and knowledge of rules, strategies, and terminology in a variety of non-traditional activities.

***[PE 200] Foundations of Physical Education***

This course investigates the nature and scope of physical education including philosophy, objectives and the role of movement and fitness. It involves the application of historical and scientific foundations as they apply to physical education and sport and considers career and professional opportunities in physical education and sport.

***[PE 202] Strength and Conditioning Exercise Techniques***

The purpose of this course is to understand the techniques (lifting, breathing, spotting) involved in properly performing strength and conditioning exercises.



### ***[PE 222] Life Guard Training***

This course is designed to teach the student safety education in and around the aquatic environment and to teach basic rescue and resuscitation skills for emergency situations.

### ***[PE 250] Officiating Football***

This course introduces the student to the role and function of the state high school leagues and local officiating associations. The student will learn the high school code of football rules and demonstrate a knowledge of the mechanics of administering a high school football contest.

### ***[PE 255] Officiating Baseball***

This class is for the beginning umpire as well as an experienced one. It will cover all aspects; how to get into your local association, college association, and pro baseball. The rules and mechanics of umpiring baseball will be the focal point, thus preparing the novice to start, and the veteran to move up.

### ***[PE 256] Officiating Wrestling***

This course introduces the student to the role and function of the state high school leagues and local wrestling associations. The student will learn the high school code of wrestling rules and demonstrate knowledge of the mechanics of administering a high school wrestling contest.

### ***[PE 290] Topics in Physical Education***

This is a topical course in Physical Education. The course may be repeated if content varies.

### ***[PE 302] Strength and Conditioning Program Design***

The purpose of this course is to design strength and conditioning training programs that are safe, effective, and maximize athletic performance.

### ***[PE 310] Sport and Play in the United States***

This course is an investigation of sport and play in American society. It involves the application of concepts from various disciplines to sport and play and the development of an understanding of the functions that sport and play serve in the United States.

### ***[PE 311] Motor Learning***

This course is designed to expose students to different learning theories and how to incorporate them into teaching motor skills. Areas of study include theoretical and applied knowledge of the individual, instructional and environmental variables relevant to teaching, learning and performance of various motor activities.

### ***[PE 320] Anatomical Kinesiology***

A study of the applied human anatomy with a focus on the musculoskeletal systems. The student will learn basic skeletal structure, make-up and functional capabilities at the various joints, the role of the musculature in human movement and apply these concepts to real life situations.

***[PE 321] Human Physiology***

This course is designed to study the physiology of the different organ systems of the human body. The course will stress the application of physiological principles related to health and disease.

***[PE 360] Elementary Methods in Physical Education***

This course is designed to prepare students to teach physical education to children in grades K-6. Course content reflects the idea that teaching is goal directed and a skill that requires practice. Students are required to observe, participate, teach and evaluate elementary school physical education. The prerequisites can be waived with the consent of the instructor.

***[PE 361] Secondary Methods in Physical Education***

This course is designed to prepare students to effectively teach physical education activities to student in grades 7-12.

***[PE 362] Middle School Methods in Physical Education***

Study, demonstration and exploration of methods and techniques of presenting sports, games, and movement skills to middle school students in grades 6-8. Curriculum design and development, as well as techniques for organizing groups will be included. The prerequisites can be waived with the consent of the instructor.

***[PE 364] Group Exercise Instruction***

This class will prepare students to teach all kinds of group exercise classes. Group exercise instructors conduct group exercise sessions that include aerobic exercise, stretching and muscle conditioning.

***[PE 365] Health and Fitness Instructor***

This course prepares students to meet the competencies established by the American College of Sports Medicine for a health fitness instructor.

***[PE 367] Coaching Soccer***

This course is designed to provide an overview of soccer as it relates to current soccer coaching methods and theories. Team management, coaching methods of technique and tactics along with match analysis will be examined.

***[PE 371] Coaching Football***

This course is intended to help prepare students for coaching high school football. Emphasis is placed on students developing a philosophy concerning all aspects of coaching football.

***[PE 372] Coaching Basketball***

This course is designed for students to acquire the knowledge and skills necessary to successfully coach basketball at the junior and senior high school levels.

***[PE 373] Coaching Baseball and Softball***

This course is designed to teach the skills and knowledge necessary to coach baseball and softball at the youth and secondary school levels.

***[PE 374] Coaching Track and Field***

This course is designed to prepare students to effectively coach track and field to junior and senior high school students. It involves the application of strategies, placement of personnel and meet management. Students will learn about equipment, safety precautions and be able to perform basic track and field skills.

***[PE 375] Coaching Wrestling***

This course is designed to prepare students to coach wrestling at the junior and senior high school levels. MnTC Goal 3.

***[PE 376] Coaching Golf and Tennis***

This course is designed to prepare the student to coach competitive golf and tennis at the junior and senior high school levels.

***[PE 378] Coaching Swimming and Diving***

This course is designed to teach the skills and knowledge necessary to coach swimming and diving. The course will also cover expectations of officiating score keeping for swimming meets.

***[PE 379] Coaching Volleyball***

This course prepares students to effectively coach volleyball at the elementary or secondary school level. Students learn about season and practice management, principles of physical training, development and analysis of skills, offensive and defensive team play, game management and evaluative procedures.

***[PE 390] Topics in Physical Education***

This is a topical course in Physical Education. The course may be repeated if content varies.

***[PE 402] Strength and Conditioning Practicum***

This course is designed to provide students the opportunity to apply the principles of strength and conditioning training under the supervision of strength and conditioning specialists.

***[PE 420] Biomechanics***

This course is designed to develop an understanding of the mechanical principles that govern the effectiveness with which physical education and sport skills are performed. The prerequisite can be waived with the consent of the instructor.

***[PE 421] Physiology of Exercise***

A study of the function of those body systems most directly affected by and involved in exercise. Physiological consideration in human movement such as thermal regulation, performance at altitude and underwater, drugs and other ergogenic aids, and designing of specialized training programs will be pursued.

***[PE 452] Adaptive Physical Education***

This course provides the student with an introductory study to adapted physical education and includes strategies for meeting the needs of student with disabilities in the least restrictive environment.

***[PE 453] Assessment and Programming in DAPE***

Prepares Developmental Adaptive specialists to administer a variety of norm and criteria referenced tests, and design age-appropriate learning activities.

***[PE 454] Curriculum in Developmental Adapted Physical Education***

Prepares Developmental Adapted specialists to provide direct service to handicapped students, serve as consultants to other physical education teachers, assess motor and physical fitness levels, write individual programs, read and understand research in adapted physical education.

***[PE 456L] Lab Curriculum and Assessment for Severely Handicapped***

This course involves application of the functional program philosophy associated with teaching students with severe disabilities. This 30 hour lab course requires students to develop a 'clip board' instructional system for planning, teaching, and evaluating physical education activities.

***[PE 460] Principles of Coaching***

This course is designed to introduce students to the basic principles, philosophies and theories associated with effective coaching. A major emphasis will be placed on coaching philosophy, sport pedagogy, psychological aspects of coaching, and the legal issues involved with coaching.

***[PE 461] Coaching Practicum***

This course is designed to provide students the opportunity to apply the principles and practices of coaching in a junior high or high school environment. The student will be allowed to actively participate in practical coaching experiences under the guidance and supervision of a qualified coach. Should be taken after or concurrently with PE 370's course or PE 460.

***[PE 469] Internship***

Designed to give students an opportunity to gain supervised clinical experiences working with a variety of state and local agencies. A maximum of 12 internship credits may be applied to the degree.

### ***[PE 473] Exercise Testing and Interpretation***

This course provides instruction in the guidelines and principles of advanced exercise testing and ECG interpretation.

### ***[PE 474] Tests and Measurements in Physical Education***

This course deals with the theory of measurement in physical education, the selection and administration of appropriate tests, and the interpretation of results by fundamental statistical procedures. Students should have junior status prior to enrolling in this course.

### ***[PE 490] Topics in Physical Education***

This is a topical course in Physical Education. The course may be repeated if the topic changes.

### ***[PE 497] PE Independent Study***

Physical education independent study allowing an individual to explore a specific topic under faculty supervision.

## **Physical Science**

### ***[PSCI 170] Physical Science I***

Activity-based conceptual learning, appropriate to the elementary classroom and to the life-long learning of physical science will be modeled in the course. Lab included. MnTC Goal 3.

### ***[PSCI 378] Energy and the Environment***

This course will examine the relationships between civilization, society and energy use. This will be accomplished by examining current and possible future energy sources as developed through the sciences of physics and chemistry and their applied technologies. It will then examine the applications of current sources and their effects on society and world ecosystems. Finally the course will examine how societies change and adapt, and look at possible steps to a sustainable energy and environmental future. MnTC Goal 3 and 10.

### ***[PSCI 385] Hiroshima Peace Studies Tour***

Students will explore the history of nuclear weapons, and discuss the roles of Hiroshima and Nagasaki today. Students will travel to Hiroshima, and will keep a journal, using this and other research done prior to the trip to develop a course project. Structured activities in Hiroshima will include visiting the Peace Park and Peace Museum, talks by scholars from Hiroshima University on peace studies topics, visits to historical and cultural sites, such as Hiroshima Castle, and the island of Miyajima. Same as HON 385. MnTC Goal 8.

## **Physics**

### ***[PHYS 105] Physics of Music***

Physical principles governing the production, transmission and reception of musical sound. A background in music is strongly recommended. Lab included. MnTC Goal 3.

### ***[PHYS 140] Introduction to Sustainability***

This course introduces the concept of environmental sustainability using energy as a theme. We will examine how a variety of cultures utilize energy and how these cultures approach sustainability. Using a systems approach we will explore current energy trends and discuss future energy scenarios. Relevant topics from physics, chemistry, biosciences and earth science will be covered as they relate to sustainability. The tradeoffs (environmental as well as economic) associated with generating and using energy for different cultures will be examined. Finally we will explore what actions are needed to work towards a sustainable energy future. Students should have completed or be concurrently enrolled in College Algebra.

### ***[PHYS 160] College Physics I & Lab***

Concepts and principles of elementary physics presented in a guided activity-based format which integrates lecture and laboratory using cooperative group learning techniques. Includes kinematics and mechanics. MnTC Goal 3.

### ***[PHYS 161] College Physics II & Lab***

Concepts and principles of elementary physics presented in a guided activity-based format which integrates lecture and laboratory using cooperative group learning techniques. Includes thermal physics, electromagnetism, and optics.

### ***[PHYS 190] Topics in Physics***

A study of a specific area of physics.

### ***[PHYS 200] General Physics I & Lab***

Calculus-based study of general physics presented in a guided activity-based format which integrates laboratory and lecture using cooperative learning techniques. Includes kinematics, conservation laws (energy, momentum and angular momentum) and harmonic oscillations. MnTC Goal 3.

### ***[PHYS 201] General Physics II & Lab***

Calculus-based study of general physics presented in a guided activity-based format which integrates laboratory and lecture using cooperative learning techniques. Includes electric charges, electric fields, capacitance electric circuits, magnetic fields, electromagnetic induction and an introduction to optics. MnTC Goal 3.

### ***[PHYS 202] Introduction to 20th Century Physics***

Introduction to physics topics in 20th century physics: thermodynamics, physical optics, and overview of atomic, molecular, and particle physics. A weekly hour long lab period is included in regular class hours.

### ***[PHYS 290] Topics in Physics***

Students may register more than once when topic varies.

### ***[PHYS 302] Sustainable Energy-Science and Application***

This course provides an overview of the science involved in renewable energy and the application of that science. The student will gain an understanding of the science involved in energy production, energy storage, and energy conservation. They will complete a group project in developing their own design in one of the sustainable technologies. This course does not count as an elective for the B.S. degree in Physics. Student must have completed CCGE 123 or MATH 127 or other College Algebra or higher course.

### ***[PHYS 305] Experimental Physics I***

Study of laboratory techniques and measuring instruments.

### ***[PHYS 306] Experimental Physics II***

Study of laboratory techniques and measuring instruments.

### ***[PHYS 312] Analog Electronics***

This course provides a general overview of analog electronics (electrical engineering), and includes a number of electronics laboratory activities completed during regular class hours. The course will cover circuit analysis (DC and AC), explore semiconductor devices (diodes and transistors), analog electronics (operational amplifiers) and timer circuits. Student must have completed either PHYS 161 or PHYS 201 and either MATH 229 or MATH 261.

### ***[PHYS 315] Physics Seminar***

Students will be required to read and present journal articles periodically. Students will discuss the physics involved and participate in informal discussions with the faculty and fellow students. Potential topics might include recent discoveries in physics or astronomy, novel experimental techniques or apparatus, novel physical theories, and demonstrations for physics instruction. Course is repeatable, but only a total of 2 credits in any combination of seminar (PHYS 315), research (PHYS 300), and internship (PHYS 469) counts towards physics electives for both the major and the minor.

### ***[PHYS 318] Biophysics and Medical Imaging***

This course is a calculus-based study of biophysics and medical imaging techniques and topics covering optical microscopy, computed (axial) tomography (CT or CAT), magnetic resonance imaging (MRI), ultrasound imaging and positron emission tomography (PET). Techniques in real space and Fourier space imaging will be covered including resolution, aberrations and exposure limitations. Special attention will be given to radiation effects and nuclear medicine topics. This course will use cooperative learning techniques along with guided labs covering selected techniques.

### ***[PHYS 322] Elementary Modern Physics***

An introduction to special relativity, the Bohr atom, wave mechanics and the Schrodinger equation, the hydrogen atom, many electron atoms, nuclear properties and reactions and elementary particles.

### ***[PHYS 325] Optics***

This course covers geometrical and physical optics including paraxial theory, interference, diffraction, polarization and optical instruments.

***[PHYS 330] Intermediate Mechanics***

An advanced unified approach to physical problems: Newton's Laws; particle dynamics in one, two, and three dimensions; systems of particles, gravitation, moving reference frames; Lagrange's equations, dynamics of rigid bodies; Hamilton's equations.

***[PHYS 342] Introduction to Research***

The course will prepare students for independent undergraduate research. The students will be introduced to the literature search process, common research techniques, safety aspects, faculty research interests and applications of science in industry.

***[PHYS 350] Computational Methods for Physical Science***

This course is an introduction to solving problems by computer using techniques pertinent to students in the physical sciences. Topics are covered in relation to specific problems in the physical sciences. Topics may include matrix manipulation, numeric integration and differentiation, and numeric solution of differential equations.

***[PHYS 370] Electromagnetic Theory***

Advanced study of electromagnetism including algebra and calculus of vectors, electrostatics in a vacuum and in dielectric materials, magnetostatics in nonmagnetic and magnetic materials, Maxwell's Equations and electromagnetic waves.

***[PHYS 385] Hiroshima Peace Studies Tour***

This course is planned around a one week trip to Hiroshima, Japan. Topics will include: the science of radiation and nuclear weapons; the experiences of those who lived through the atomic bombing of Hiroshima and Nagasaki; how these experiences are relevant to the rest of humanity; and Japanese history, language and culture. Students will pursue individual projects, and perform field work assignments in Hiroshima. Same as JAPN 385. MnTC Goal 8.

***[PHYS 390] Topics in Physics***

Students may register more than once when topic varies.

***[PHYS 394] Physics Research***

Student and faculty member will work on a physics project of mutual interest. Course is repeatable, but only a total of 2 credits in any combination of seminar (PHYS 315), research (PHYS 394), and internship (PHYS 469) counts towards physics electives for both the major and the minor.

***[PHYS 399] Thermodynamics***

Elements of classical thermodynamics, kinetic theory and statistical mechanics.



### ***[PHYS 430] Quantum Mechanics***

Application of quantum mechanics to atoms and molecules.

### ***[PHYS 440] Secondary Science Teaching Methods***

For secondary education students. Material and methods typical to high school physics.

### ***[PHYS 469] Internship***

Supervised practical work experience at an approved business, industry or workplace where physics principles are used. The student must work a minimum of 40 hours for each credit earned. During the semester, this is equivalent to 3 hours per week for each credit. Enrolling in 4 or more credits requires department approval. Course is repeatable, but only a total of 2 credits in any combination of seminar (PHYS 315), research (PHYS 300), and internship (PHYS 469) counts towards physics electives for both the major and the minor.

### ***[PHYS 490] Topics in Physics***

Students may register more than once when topic varies.

### ***[PHYS 492] Senior Project***

A project involving experimental and/or theoretical research on a physics topic with extensive library research as well. A detailed written report and an oral presentation are required.

## **Political Science**

### ***[POL 105] Making Sense of Politics***

This course is designed to help the citizens of modern society understand the recurring principles, practices, and patterns of politics. Having learned how politics affects our lives every day, students can become informed participants at the local, national, and global levels. MnTC Goal 5.

### ***[POL 120] American National Government and Politics***

This course examines the United States national government; how and why it works. This course will analyze the role of institutions on decision-making and the consequences for public policy. It will address what political science and other social sciences tell us about factors that influence politics, government and the policies that result from the process. MnTC Goal 5 and 9.

### ***[POL 140] Political Statecraft***

Statecraft is the art of crafting governmental affairs. This class will explore the use of problem solving simulations to expose students to how democracies, constitutional monarchies, dictatorships, and governments in a state of revolution work to approach and solve public problems such as funding social programs, confronting natural disasters, and addressing military crises. MnTC Goal 2.

### ***[POL 160] International Relations***

Nation-state system: the network of economic, political, cultural and technological interdependence; power, diplomacy, intelligence, war and the arms race. MnTC Goal 5 and 8.

***[POL 210] Introduction to Political Science***

An introduction to the major questions of political science and the scientific study of politics. Conceptual development is examined as represented in the major fields of political science.

***[POL 221] Minnesota State and Local Government***

A study of the basic functions, structure, procedures and problems of American state and local government, with an emphasis upon intergovernmental relations. MnTC Goal 5 and 9.

***[POL 230] Introduction to the Law***

The philosophy of law; its social context; justice and its implications; evolution of legal concepts and systems.

***[POL 265] International Protection of Human Rights***

This course focuses on the contemporary concern with human rights in its political, social, cultural, and legal contexts. It examines the history, philosophy, and legal foundations of the human rights movement, and how the ideas and context of human rights are realized in different societies.

***[POL 290] Topics in Political Science***

Examination of an issue at an introductory level. May be repeated as topic varies.

***[POL 310] Political Science Research Methods***

Introduction to empirical research in political science; the nature and role of theory, research design, measurement, and the selection and interpretation of inferential statistics.

***[POL 314] War and the Modern World***

This course examines world military affairs and patterns of warfare from mid-eighteenth century to the present day. Particular attention will be given to the interplay of cultural, political, and technological factors in the formation of military institutions and in the experience of warfare by diverse constituencies in the participating groups. MnTC Goal 8.

***[POL 315] Political Thought***

Selected reading and analysis of the major ideas and concepts that have influenced the evolution of modern political ideas. MnTC Goal 9.

***[POL 316] War and the Environment***

Study of the relationship between human armed conflict and the physical environment, including climate change and resource demand as drivers for conflict, the international security issues arising from

environmental disasters, contested borders, contamination resulting from wars and prospects for environmental humanitarianism and peacemaking. MnTC Goal 10.

***[POL 322] Executive and Legislative Process***

Legislative and executive decision-making and organization. Relationships between the two branches and with other parts of government, political parties, and the political process.

***[POL 324] Political Parties and Interest Groups***

This course will examine the role of parties in American politics and the relationship between parties and interest groups which is relatively new to American politics. The course will examine how parties compete with and complement one another. The behavior of parties and interest groups in elections and governance will be examined.

***[POL 327] Campaigns & Elections***

This course examines the politics of campaigns and elections in the United States. Topics include campaigns in democratic theory, candidate selection, campaign finance, campaign strategy and organization, the role of parties and interest groups, public opinion polling, and campaign communication. MnTC Goal 9.

***[POL 328] The Media and Politics***

The media's role in politics, including relations between the media and government.

***[POL 332] Constitutional Law I: Institutional Powers and Constraints***

This course focuses on the topics of judicial review, separation of powers, federalism, and economic regulation, including commerce and taxation, substantive due process, and eminent domain.

***[POL 333] Constitutional Law II: Civil Rights and Liberties***

This course focuses on the First Amendment freedoms -- speech, press, expression, assembly and religion and questions of race, gender and ethnicity, due process, equal protection, voting rights and the right to privacy under the Fifth and Fourteenth Amendments. MnTC Goal 7.

***[POL 335] Criminal Law***

Substantive criminal law; development of principles, meaning and applications of criminal law; current issues and institutions. Same as CJ 335

***[POL 337] Criminal Procedure***

The course will examine contemporary interpretations of the U.S. Constitution's protections for the criminally accused, which are primarily found in the 4th, 5th, 6th, 8th, and 14th Amendments.

***[POL 340] Public Administration***

The structure, operation, and politics of public bureaucracy, and its relations with other actors and institutions in government.

***[POL 341] Public Policy***

An examination of the development, implementation, and evaluation of public policy.

***[POL 345] Environmental Politics***

The course examines how national and international politics affects the success (and failure) of environmental policies. Since environmental policy is shaped in political arenas by a myriad of social and economic forces combined with observations of the natural world, the course content examine environmental issues with more of an inter-disciplinary approach. Students will gain an intellectually more mature understanding of how environmental policy is made, modified and implemented (or not) in response to political demands that often ignore the scientific realities of the environment. MnTC Goal 10.

***[POL 349] Great Power Politics***

International survey of major wars, the development of states' military and financial capacity, the course of imperial expansion and retreat, diplomatic alignments and alliances, arrangements for international trade and investment, as well as efforts to create international institutions by major national powers in the modern world.

***[POL 350] Comparative Governments of Western Europe***

Comparative examination of the political systems of Britain, France, Germany, and Italy; trans-national cooperation among them.

***[POL 352] Political Problems in Developing Countries***

Social and economic conditions affecting political institutions in the developing counties. The Third World in international relations and the political economy of development. MnTC Goal 8.

***[POL 354] U.S. Defense Policy***

Introduction to the concepts and issues in the analysis of U.S. defense policy. Topics include development of contemporary defense policy, analysis of the external environment, strategic considerations, the use of force, and defense decision making.

***[POL 356] Soviet Russia and the Global Cold War***

This course examines the events of the creation of the Soviet Union and its participation in global cold war ranging from the first World War through its collapse in 1989. It will discuss the relationship between the USSR and its satellite states in Eastern Europe and its client states throughout the world, focusing on case studies of conflicts both within the alliance as well as with outside forces including those of NATO. Discussion of the causes of the eventual collapse of the Warsaw Pact and the emergence of a post-Soviet state under Vladimir Putin will also follow. MnTC Goal 8.

***[POL 360] American Foreign Policy***

Analysis of U.S. foreign policy, with an emphasis on decision making and the policy process.

***[POL 361] International Political Economy***

This course will examine the political, economic, and social processes governing international production, trade, and consumption. It includes an examination of the political economy of North-South relations.

***[POL 363] Public International Law***

This course covers the history, codification and progressive development of international public law. It examines issues such as the sources of public international law, legal personality, state responsibility for breaches, judicial and non-judicial remedies, territory, the law of the sea, air and outerspace, treaty law, decisions of the ICJ and other international institutions and the role of international law in U.S. courts.

***[POL 364] International Migration***

This course is designed to develop a good knowledge of the politics, economics and international law and organizations of international migration. Same as INTL 364. MnTC Goal 8.

***[POL 368] International Organizations***

This course explores the nature, dimensions and functions of international organizations as a new and multi-faceted phenomenon. It examines the emergence, growth and proliferation of international organizations and the factors that have contributed to this development. It also explores the nature of the international environment, the constraints and opportunities which flow from this environment, the role of an international secretariat, its scope and limitations. It focuses on both intergovernmental and non-governmental organizations.

***[POL 370] Understanding International Security***

This course highlights a series of traditional and non-traditional security issues that have emerged on the Security Studies agenda. The course begins with traditional security concerns such as the threat and use of force, and then moves to the non-traditional issues that have emerged as the subject area has expanded. Same as INTL 370. MnTC Goal 8.

***[POL 390] Topics in Political Science***

This is an upper division topical course and may be repeated when the topic varies.

***[POL 469] Internship***

A supervised practical experience in political science. A maximum of four credits may be used as electives to fulfill the "Major Requirements in Political Science", and a maximum of 12 internship credits may be applied to the degree.

***[POL 490] Topics in Political Science***

This is a senior level topics course and may be repeated as topic varies.

### ***[POL 497] Independent Study in Political Science***

Readings, research papers, special projects with the close supervision of a member of the department.

## **Project Management**

### ***[PMGT 300] Project Management and Scheduling***

This course is intended to teach the students an introduction to project management and project software and how to apply each phase of a PM methodology, with solid documentation processes. The topics include reviewing project management careers, explaining the PM role, discussing basic terminology, creating a business case for a project, demonstrating how to complete each activity required to define, plan, execute and close a project, documentation process and a deep understanding of how to track a project in an electronic software package.

### ***[PMGT 301] Introduction to CRM***

This course will help you understand the basic concepts of customer relationship management and how they manifest themselves into business strategy. This course will use Microsoft Dynamics CRM to illustrate and implement these strategic concepts into real life business scenarios.

### ***[PMGT 385] Process Leadership***

This course focuses on the development of project leadership with emphasis on advancing your own personal leadership style, learning how to assemble and build a team, managing performance, basic human resource functions and problem solving, negotiation, emotional intelligence, communication, coaching, entrepreneurship, and resource planning. Case studies, class discussion, written assignments, and oral presentations are utilized in instructional delivery.

### ***[PMGT 390] Topics in Project Management***

Topics in Project Management

### ***[PMGT 400] Advanced Project Management, Risk & Liability***

This course is intended to focus on the leadership of a project and less on the tactical tools and methodologies. Topics will include how to build cross functional teams, advanced budgets, human resource assignments, stakeholders, project communication plans, advanced change management and change order process, advanced analysis of project risks, liabilities and constraints and how to overcome. It will assess the influences of different cultural constraints on a project and how to mitigate the risk of culture impeding a projects success.

### ***[PMGT 401] Customer Relationship Management Consulting***

In this course, students will explore both the theoretical and practical application of guiding a customer through a buying decision as well as continual engagement throughout the customer life-cycle. Moreover, this course will collectively collaborate on real-life case studies involving both engaged and not engaged clients and customers.

## ***[PMGT 490] Topics in Project Management***

Topics in Project Management

## ***[PMGT 492] Project Management Capstone***

The primary goal of Project Management is to manage projects so that they are completed on time, within budget, and in accordance with contract documents. This course synthesizes all the variables in a project including people, processes, methodologies, and tools. The course will emulate a real project team with the execution of a live project or the analysis of an advanced project management case study.

## **Psychology**

### ***[PSY 113] General Psychology***

Survey of content and methods of modern psychology. MnTC Goal 5.

### ***[PSY 202] Developmental Psychology***

Psychological development of the individual from conception to death, including genetic, pre-and post-natal influences; relations with parents and peers; social, emotional and intellectual development.

### ***[PSY 220] Social Behavior***

The influence of other people on the behavior and attitudes of individuals. Topics include attitude change, the effect of being a part of a group, attraction, aggression, sex roles and discrimination. Theory and application. MnTC Goal 5.

### ***[PSY 230] Statistics for the Behavioral Sciences***

Descriptive and inferential statistics, hypothesis testing. Analysis of variance designs; multiple-comparison tests; nonparametric tests; computer application to statistics. Laboratory included.

### ***[PSY 230L] Statistics for Behavioral Sciences Laboratory***

This is a zero-credit lab that accompanies PSY 230.

### ***[PSY 261] Personality***

Introduction to the study/explanation of human behavior, motivation and conflict emphasizing personality as viewed by a variety of theorists.

### ***[PSY 265] Health Psychology***

Study of psychosocial influences in health maintenance and prevention of illness. Emphasis is on cognitive-behavioral intervention to promote life-style changes and increase compliance with medical regimens.

### ***[PSY 275] Behavior Modification***

Application of basic learning principles to the study of behavior change across community, home and school settings. Topics include reinforcement, extinction, punishment, shaping, self-management, and clinical behavior analysis.

***[PSY 290] Topics in Psychology***

This is a lower division topics course and may be repeated when the topic changes.

***[PSY 294] Directed Research***

Conduct of research under direct supervision of a faculty member. Emphasis is on experience and learning with regard to research design and analysis.

***[PSY 310] Psychology of Women***

The interacting effects of biology, physiology, and psychology on female development, providing evidence on sex differences and role differentiation.

***[PSY 317] Alcoholism and Drug Abuse***

Informational survey and study of alcoholism and drug abuse, a major health problem with substantive psychological components. The physiological, psychological, and social impact of drugs and their misuses and abuses will be discussed. Students must have taken Psy 113, or have the consent of the instructor.

***[PSY 320] Social Psychology***

Theories and research involving individual's reactions to others. Topics: social perception, attraction, social influence, aggression, social exchange. Students must have earned six credits in psychology courses, prior to enrolling in this course.

***[PSY 323] Industrial/Organizational Psychology***

Understanding the behavior of individuals at work plus psychology's contribution to their selection, training, evaluation and motivation. Students must have earned six credits in psychology courses prior to enrolling in this class.

***[PSY 324] Environmental Psychology***

The scientific study of the relationship between humans and their social and physical environment from a psychological perspective and other related fields. Topics include: environmental perception and cognition, crowding, noise, privacy, urban environments, the psychology of sustainability and designing more habitable environments. MnTC Goal 10.

***[PSY 325] Introduction to Art Therapy***

This course will present an introductory experience to the creative process as visual expression using a variety of media and approaches to art therapy. This course will introduce art therapy history, theory, principles and practice. Students will explore the professional field and ethical issues related to art therapy.



### ***[PSY 330] Experimental Methods***

Course emphasizing report writing (APA editorial style), and research methodology, and application of statistics.

### ***[PSY 342] Learning and Memory***

A survey of classical and operant conditioning, observational learning, and models of memory storage and retrieval. Students must have earned six credits in psychology courses prior to enrolling in this class.

### ***[PSY 345] Physiological Psychology***

Basic biological facts and their relationship to behavior. An analysis of the senses, hormonal systems, brain and peripheral nervous system will be included. Students must have earned six credits in psychology courses prior to enrolling in this course.

### ***[PSY 348] Cognition and Perception***

Study of cognitive and perceptual theories and processes. Students must have earned six credits in psychology courses prior to enrolling in this course.

### ***[PSY 390] Topics in Psychology***

This is an upper division topics course and may be repeated when the topic changes.

### ***[PSY 402] Child/Adolescent Psychology***

Human development from the prenatal period through adolescence. Students must have earned six credits in psychology courses and have junior standing prior to enrolling in this class.

### ***[PSY 403] Adulthood and Aging***

Discussion of some of the major theoretical approaches and current issues in human development from young adulthood through old age and death. Students must have earned six credits in psychology courses and have junior standing prior to enrolling in this class.

### ***[PSY 417] Child Psychopathology***

Includes an overview of the characteristics, classification, and developmental course of disorders of childhood and adolescence. Introduces an integrative approach incorporating different theoretical models. Considers biological, familial, social and cultural contexts and individual differences. Prevention and intervention approaches discussed. Prerequisite: 9 credits of Psychology courses

### ***[PSY 430] Advanced Experimental Psychology***

Course emphasizing the critical discussion of research topics and journal articles of interest to majors, as well as the execution of an independent research project.

### ***[PSY 463] Abnormal Psychology***

Descriptive and explanatory models are detailed in relation to their relevance to behavior pathology and the prevention of abnormal behavior. Students must have earned nine credits in psychology courses and junior standing or have the consent of the instructor. It is strongly recommended that students have taken PSY 261 prior to taking this course.

### ***[PSY 465] Clinical Psychology***

Discussion of techniques of psychotherapy, crisis intervention, interviewing, clinical assessment and prevention of disorder. Emphasis on psychotherapy as a process of understanding. Students must have earned nine credits in psychology courses and junior standing or have the consent of the instructor.

### ***[PSY 469] Internship***

Placement in a practical setting under appropriate individual or agency and departmental supervision. Students must be psychology majors with at least junior standing and must have a GPA of 2.5 or higher. A maximum of 12 internship credits may be applied to the degree.

### ***[PSY 470] History and Systems of Psychology***

An overview of the development of psychology from associationism to the present. Schools, fields and areas of psychology are emphasized. Students must have earned nine credits in psychology courses and have junior standing prior to enrolling in this class.

### ***[PSY 490] Topics in Psychology***

Coverage of a topic not central to other courses in the department. Topics will vary depending on the interest of students and faculty. Students must have earned nine credits in psychology courses and have junior standing prior to enrolling in this class.

### ***[PSY 492] Seminar in Psychology***

For majors and advanced students in other areas. Student participation emphasized. Content may vary each semester. Students must have earned nine credits in psychology courses and have junior standing prior to enrolling in this class. Students should have completed PSY 330 prior to enrollment.

### ***[PSY 494] Undergraduate Research***

Student assumes responsibility in the implementation of research related to interests of a faculty supervisor or in the area of their own choosing. Weekly meeting required. Must have completed 9 credits of psychology coursework and have junior standing.

## **School of Teaching and Learning**

### ***[STL 226] Social Studies Content for Elementary Teachers***

In this course, students will receive background on the content of social studies with special emphases on the fields of geography, history, government and economics, which are the backbone of the elementary and middle school social studies curriculum. Other parts of the social studies will also be discussed. In addition,

students will receive background on the history, government and culture of Minnesota's American Indian groups.

### ***[STL 291] Early Literacy***

This course provides the learner with an overview of early literacy development in children ages birth to 6. Attention will be focused on the continuum of early literacy development; the relationship between language acquisition and early literacy; the importance of promoting literacy development in all children, particularly those with special needs; the impact of sociological and cultural factors on literacy development; and the wide variety of home and school experiences that provide children with a solid foundation of success for learning to read and write.

### ***[STL 327] Technology in Education***

This course provides a balanced look at technology and its effect on people and society by reviewing social, legal, ethical, and human issues faced by educators and students. Teacher candidates will work with various instructional technologies to explore communication, collaboration, instruction and assessment in P-12 classrooms. The course will discuss protection of intellectual property and safety/privacy issues in the use of educational technologies.

### ***[STL 330] Child Development and Learning for Teachers***

This course explores the growth, development and learning of children from conception through adolescence. It addresses the relationship between development and learning and explores implications for teaching. Growth and learning are explored through a matrix of developmental domains and specific content knowledge areas.

### ***[STL 341] Reading and Writing Methods PreK-3***

First in a series of two methods courses where candidates will learn and apply knowledge and pedagogy that supports the development of reading and writing in young children. By knowing and understanding the ages and stages of literacy development, candidates will begin to explore effective instructional practices focusing on integrating the five areas of reading within a balanced literacy instructional framework for primary age children. A response to intervention approach to instruction will be integrated so candidates will engage in instructional best practices to meet all children's unique learning needs.

### ***[STL 388] Classroom Assessment***

In this course, we examine assessment broadly as we examine principles of effective and appropriate assessment that apply to children from birth to grade eight and across multiple subject areas. Principles of assessment taught in this course include: assessment for learning, assessment of learning, users of assessment, purposes of assessment, bias, validity, reliability, assessment targets and methods, and standardized vs. informal assessment. This course also provides an overview of the major types of assessment methods used by classroom teachers to evaluate student performance and improve instruction. Specifically, the course will address the use, construction, and interpretation of assessments that utilize the following methods: selected response, essay, performance, and personal communication. We will assess students' dispositions as well as the examination and basic interpretation of standardized tests.

### ***[STL 390] Topics in STL***

This is an upper division topical course which may be repeated when the topic changes.

***[STL 413] Effective Teaching***

In this course, the candidate continues to develop an understanding of how students learn and how students develop intellectually, socially, and emotionally. Candidates will understand how to meet the needs of culturally and/or developmentally diverse learners across the scope and content of the curriculum. Candidates will identify and design instructional approaches which nurture critical thinking skills, model problem solving, and encourage student achievement. The candidate will develop, implement, and evaluate lesson plans which meet the individual and developmental needs of learners. Candidates will explore the use of educational technology for motivation, instruction, and assessment. Candidates will model effective and respectful communication techniques. The candidate will understand the role of special education and the varying models of special education services including co-teaching with the general education teacher. The candidate will demonstrate an understanding of the role of the individual education plan for students with identified special education needs and the role of the classroom teacher in adapting instruction and curriculum according to the IEP.

***[STL 428] Building Partnerships***

This course will focus on the knowledge, skills, and dispositions necessary for building relationships in the field of education. Understanding issues faced by contemporary families and their relationship to schools will be studied. Barriers, strategies, communication, consultation and cross-cultural sensitivity are covered. The teacher's role in building effective relationships with families and other professionals is emphasized.

***[STL 441] Children's Literature: Content and Methods***

This course requires close reading and study of children's literature--folktales, myth, hero tales, picture books, poetry, modern fantasy, biographies and realism. Emphasis is placed on the nature of children's literature, literature from diverse cultures, criteria for selection, and strategies for reading/teaching literature as a content field in the elementary school.

***[STL 442] Advanced Reading and Writing Methods PreK-3***

This is the second methods course for teaching reading and writing to primary age children. In this course candidates will deepen their knowledge of how to effectively teach reading and writing in the primary grades. STL 442 includes a strong emphasis on the role of assessment in the teaching and learning process, exposes candidates to a variety of literacy assessments, and continues to build their understanding of a response to intervention approach to instruction.

***[STL 443] Learning Environment***

In this course, students will be instructed on the impact the physical, social, communicative, academic, and behavioral needs of the classroom community. During this course, candidates will demonstrate competencies drawn from the MN Board of Teaching standards. Competencies associated with this course will be applied and evaluated in a rigorous field experience.

***[STL 474] Methods in Teaching Elementary Science and Environmental Education***

Methods course for teaching science and environment education in elementary settings. Emphasizes inquiry learning, methods of instruction and assessment, place-based environmental education, integration across the curriculum, safety, and responsiveness to student diversity. Recommended Corequisite: STL 476.

***[STL 475] Teaching Reading and Writing Grades 4-6***

Methods course for teaching language arts in the intermediate grades. In this course candidates will learn strategies to strengthen students' ability to read advanced texts as well as the use of reading and writing to learn content across the curriculum. Candidates will examine a variety of instructional approaches, including: literature circles, integrating literature into content learning, and building comprehension and vocabulary through integrated experiences. In addition, students will explore a variety of language arts curricula. Candidates will develop a range of strategies to support older students' reading and writing development through a response to intervention instructional approach.

***[STL 476] Methods for Teaching Elementary Social Studies***

Content, philosophy, and organization of social studies program; methods of instruction and curricular issues. Recommended Co-requisite STL 474.

***[STL 481E] Student Teaching: Elementary***

Supervised student teaching experience in an elementary school setting. Includes weekly seminar.

***[STL 490] Topics in School of Teaching and Learning***

This is an upper division topical course which may be repeated when the topic changes.

***[STL 497] Independent Study in STL***

Independent study in the School of Teaching and Learning.

**Social Work**

***[SW 250] Introduction to Social Welfare and Social Work***

Overview of social welfare and social work, including fields of practice, institutions, populations served, special issues, and an introduction to some social work methods and theories.

***[SW 308] Social Gerontology***

This course introduces students to the field of social gerontology for providing an overview of the significant sociological perspectives, social issues, and empirical social science research pertaining to the phenomenon of aging in society. The main goal of the course is to foster an understanding of aging as a process that is characteristic of both individuals and societies through a focus on social factors that shape the individual's experience of aging and the consequences of an aging population for social institutions. Same as SOC 308.

***[SW 330] Human Behavior and the Social Environment***

Overview and application of systems theory. Assess the interactions among individuals and between individuals and social systems. Includes an integration of bio-psycho-social variables that affect human

development and behavior. Pre-reqs are SOC 110 and PSY 113. Prior or concurrent enrollment in SW 250, PSY 202, and BIOL 104 is required.

### ***[SW 390] Topics in Social Work***

This course covers various topics from the discipline of Social Work. The course may be repeated when topics vary.

### ***[SW 400] Research Methods in Social Work***

Study of research methods (designs) and processes including assessing problems, analyzing and presenting data, and monitoring and evaluating intervention and services in social work practice. Admission to the Social Work program is required.

### ***[SW 402] Child Welfare Services***

Problems, policies, and practices in the area of child welfare. Content includes: children's guardianship, the juvenile court system, children's out-of-home care, child protection services, foster care and adoption. The listed prerequisite can be waived with consent of instructor.

### ***[SW 410] Gerontology: Policy and Practice***

This course is a writing intensive senior seminar for gerontology majors. Four to six hours a week will involve field experience working in a facility involving elderly care. Two hours a week will involve in-class discussions of the field experience as well as an examination of social policies relating to the elderly, including Social Security, Medicare, the Older Americans Act and Medicaid. Same as SOC 410.

### ***[SW 411] Chemical Dependency***

Exploration of chemical use, abuse, and addiction, with emphasis on alcohol as the drug of choice. Prevention, intervention, special problems of women, youth, elderly, and minority populations are examined. The listed prerequisite can be waived with consent of instructor.

### ***[SW 420] Generalist Practice: Individuals***

Generalist social work practice utilizing the problem-solving model with focus on the knowledge, values and skills for working with individuals. Prior or concurrent registration in SW 400 is required.

### ***[SW 431] Readings in Social Welfare***

Reading in-depth in selected areas of social work under faculty supervision and consent. Credits determined by the extent and depth of the readings.

### ***[SW 435] Generalist Practice: Families/Groups***

This course is designed to give students beginning competency skills and knowledge in generalist social work practice using the Generalist Intervention Model with the mezzo systems families and groups as the target area of practice. An ecological perspective and systems view of practice is used. Intervention theories and practice skills are studied and applied to both the family and the group as the target areas of intervention. The

course builds on knowledge grounded in the liberal arts studies, including courses such as Developmental Psychology (PSY 202), Introduction to Sociology (SOC 110), Social Psychology (SOC 120), Human Biology (BIOL 104), American Multicultural Studies (AMCS), and Women's and Gender Studies (WS) courses. This course draws from the knowledge and skills learned in SW 330 and SW 400, as well as interviewing and assessment skills from SW 420.

***[SW 450] Generalist Practice: Communities and Organizations***

Generalist social work practice utilizing the problem solving model with focus on the knowledge, values and skills for working with organizations and communities. Prior or concurrent enrollment in SW 460 is required.

***[SW 460] Social Policy and Policy Practice***

Development of social welfare policies and current policy structures, and policy practice, advocacy, analysis, and evaluation used in agency, community, and legislative settings. Admission to the Social Work program is required. Prior or concurrent registration in PARA 470 is also required.

***[SW 468] Integrative Orientation to Internship***

Social Work 468 students will examine and integrate field theory with field experience preparation as students learn about the expectations and parameters of the social work internship experience, the diversity of local and regional human services agencies, emerging trends in practice, and the development of professionalism and social work identity. Students will actively engage in internship preparation and finalization and explore methods for professional self-care. A key element in the concept of seminar is participation and discussion. The willingness and ability of students to actively participate in every class is essential to the successful completion of this course.

***[SW 469] Internship***

Required field experience under agency and departmental supervision. Opportunity to practice/integrate social work core competencies and practice behaviors (knowledge, value, and skills) obtained in class. Planning must occur one semester prior to internship. Students must have completed 90 hours of human service experience, have a minimum cumulative MSUM GPA of 2.5, and be concurrently enrolled in SW 470. Student must also have completed all major restricted electives and other electives.

***[SW 490] Topics in Social Work***

Selected topics of concern to social work students and human service professionals. May be repeated to 6 credits. Listed prerequisite can be waived with consent of instructor.

***[SW 492] Field Supervision and Integrative Seminar***

Seminar during internship to promote integration of academic knowledge and field learning with a focus on professional and ethical issues. Must be concurrently enrolled in SW 469. The instructor will also be the primary liaison between the university and field setting. The instructor will coordinate and conduct site visits for the internship experience.

***[SW 497] Independent Study***

Individual study, project, or research of special interest. Repeatable to 6 credits. May apply to the social work elective requirement for the major. Listed prerequisite can be waived with consent of instructor.

***[SW 499] Social Work Workshops***

Workshops in the Department of Social Work to meet specific needs of students and agency personnel in the community.

**Sociology**

***[SOC 110] Introduction to Sociology***

Introduces the sociological approach to understanding the structure and dynamics of society. Focuses on socialization, organization, social inequality, institutions, and social change. MnTC Goal 5.

***[SOC 120] Social Psychology***

This course examines the relationship between society and individuals and the methods, theories, and findings of research in social psychology. Special attention is given to the social properties of mind, self, and human development. MnTC Goal 5.

***[SOC 210] Social Problems***

Examines such problems as poverty crime, urban problems, family problems, environmental problems, and war and terrorism. MnTC Goal 5.

***[SOC 219] Sociology of Sexual Behavior***

Examines sociological and social psychological perspectives and research on sexual behavior. Topics include childhood sexual behavior, adolescent sexual behavior, sex and mate selection, marital sex, extramarital sex, and various forms of sexual variation.

***[SOC 220] Social Deviance***

Theory, research and commentary on the sociology of deviant behavior. MnTC Goal 5.

***[SOC 290] Topics in Sociology***

This course will consist of varying topics in the discipline of sociology.

***[SOC 300] Criminology***

This course will survey the history of crime in society, including theories, research and commentaries on crime and delinquency.

***[SOC 301] Delinquent Behavior***

Delinquent behavior and programs for its prevention, treatment and control. Same as CJ 301.

***[SOC 302] Social Theory***



Examines major theoretical approaches to the understanding of social structure and change, with special attention to the classical works of Marx, Weber, and Durkheim.

***[SOC 303] Punishment and Prisons***

This class traces the origins and development of incarceration as the principle response to crime in the U.S. It explores changing punishment practices, reasons offered to justify punishment, and the social organization of contemporary U.S. prisons.

***[SOC 304] Community Corrections***

Sociological analysis of community corrections, emphasizing probation and parole.

***[SOC 308] Social Gerontology***

This course introduces students to the field of social gerontology for providing an overview of the significant sociological perspectives, social issues, and empirical social science research pertaining to the phenomenon of aging in society. The main goal of the course is to foster an understanding of aging as a process that is characteristic of both individuals and societies through a focus on social factors that shape the individual's experience of aging and the consequences of an aging population for social institutions. Same as SW 308.

***[SOC 309] Law and Society***

Relationships of law and society; social forces in law making; dynamics of law administration; social, cultural and behavioral effects of law; history and development of the legal profession; analysis of legal language and reasoning. Prerequisite may be waived with the consent of the instructor. Same as CJ 309.

***[SOC 310] Dominant-Subordinate Group Relations***

Theoretical, historical and contemporary examination of prejudice, discrimination, and inequalities organized around race, ethnicity, and gender divisions. MnTC Goal 5.

***[SOC 311] Sociology of Law Enforcement***

Examines the origin, history and development of policing in the U.S. Specific issues such as community relations, organization, discretion, and corruption are explored from an occupational standpoint in policing.

***[SOC 319] Society and the Environment***

Throughout time societies have struggled to maintain an appropriate balance between human groups and the physical environment. This course analyzes the social causes of environmental problems in an interdisciplinary fashion. Ecology, policy, politics, culture, ethics and history are all viewed through a sociological lens to explain the relationship between humans and the physical environment. The main goal of this course is to demonstrate the complexities of relationships between people and the environment. It also focuses heavily on the processes of social change. MnTC Goal 10.

***[SOC 320] Sociology of the Family***

Examines the theoretical issues and research findings pertaining primarily to American family life. Topics include dating and mate selection, alternatives to traditional marriages, marital structure and interaction, and marital dissolution.

***[SOC 325] Social Movements***

Analysis of movement origins, ideology, dynamics, organization, challenges and success in creating social change. Theories and case studies of past and current movements, global to local. MnTC Goal 9.

***[SOC 330] Sociology of Religion***

Emphasizes a sociological understanding of religion, magic, myth, patterns of religious organizations, secularization, new religion movements, and other related topics.

***[SOC 333] Sociology of Gender***

Focuses on the social construction of gender and consequences of gender stratification for women and men. Topics may include: gender differences; the concept of "gender role"; gender in the economic, political, and educational institutions; discrimination; and the feminist movement.

***[SOC 350] Methods and Statistics for Social Research***

Focus on the logic of science, a survey of basic methodologies, and introduction to descriptive and inferential statistics.

***[SOC 351] Quantitative Methods***

This course is a continuation of Sociology 350. The objective of the course is to offer hands-on experience in quantitative research methods and data analysis. Students will design and carry out a research project utilizing quantitative research methods, analyze data using descriptive and inferential statistics, conduct elementary hypothesis testing, and write reports of their findings. Students will gain experience using statistical packages for data analyses on computers.

***[SOC 352] Qualitative Methods***

This course provides advanced training in qualitative research through an applied approach whereby students carry out an original research project, from the initial conceptualization stage, through data collection and analysis, and writing the report, and presenting the findings. This advanced data analysis course provides training in several qualitative approaches in sociological research, with the central foci on ethnographic observations and depth interviewing.

***[SOC 375] Sociology of Health and Medicine***

Social factors in health, illness, and medical care. Topics include the social construction of health/illness, the experience of illness, health professions and organizations, and the health care system.

***[SOC 390] Topics in Sociology***

Varying topics from the discipline of sociology.

### ***[SOC 404] Political Sociology***

Examines power in society, with a focus on the United States. It will include a variety of theoretical perspectives in political sociology, including Marxism, elite theories, state-centered theories, and pluralism. Major topics include: theoretical perspectives on power in society, the role of ideology in political power, the distribution of power in society, and political participation.

### ***[SOC 407] Contemporary Sociological Theory***

This advanced undergraduate seminar introduces students to contemporary sociological theory. It centers on the development of the major theoretical frameworks used by contemporary sociologists to understand the late-modern world. The starting point is the 1920s, and continues to the last fin-de-siecle and beyond. Theoretical frameworks considered includes the following: structural functionalism, systems and network theories, critical theory, rational choice and exchange theories, structuralism, structuration theory, critical race theory, feminist epistemologies, theories on power and the body, and the influence of post-modern theory.

### ***[SOC 410] Gerontology: Policy and Practice***

This course is a writing intensive senior seminar for gerontology majors. Four to six hours a week will involve field experience working in a facility involving elderly care. Two hours a week will involve in-class discussions of the field experience as well as an examination of social policies relating to the elderly, including Social Security, Medicare, the Older Americans Act and Medicaid. Same as SW 410.

### ***[SOC 412] Sociology of Complex Organizations***

Analyzes large-scale bureaucratic organizations. Topics include: the characteristics of bureaucracy; the uses of power by organizations; the effectiveness of organizations; and the impact of organizations on societal change.

### ***[SOC 450] Senior Seminar in Sociology***

This is the capstone seminar for sociology majors. Examines some of the most prominent theoretical and substantive issues identified by sociologists. The course will include a major paper and a seminar presentation.

### ***[SOC 469] Internship***

A supervised practical experience in sociology. A maximum of 12 internship credits may be applied to the degree. Internship credits may not apply to the minimum required for the sociology major.

### ***[SOC 490] Topics in Sociology***

Varying topics from the discipline of sociology.

### ***[SOC 497] Readings in Sociology***

A program of advanced readings in some topic under the supervision of an instructor. May be repeated to a maximum of 4 credits.

## **Spanish**

### ***[SPAN 101] Beginning Spanish I***

Fundamentals of Spanish. Development of the basic language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. Culture and language structure are also important components of the course. Not applicable toward the major or minor in Spanish. MnTC Goal 8.

### ***[SPAN 102] Beginning Spanish II***

Fundamentals of Spanish. Development of the basic language skills of listening, speaking, reading, and writing with an emphasis on oral proficiency. Culture and language structure are also important components of the course. Not applicable toward a major or minor in Spanish. Prerequisite SPAN 101 or equivalent proficiency. Students may demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language](http://www.mnstate.edu/language)). MnTC Goal 8.

### ***[SPAN 190] Topics in Spanish Language, Literature, and Culture***

Topics in Spanish language, literature, and culture. May be repeated since content may vary.

### ***[SPAN 201] Intermediate Spanish I***

Continued practice and review of the fundamentals of listening, speaking, reading, and writing. Classroom emphasis on oral skills. Readings on culture. Students who intend to pursue a major or minor in Spanish must take SPAN 211 concurrently with this class. Students must demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language/Spanish.cfm](http://www.mnstate.edu/language/Spanish.cfm)). MnTC Goal 8.

### ***[SPAN 202] Intermediate Spanish II***

Continued practice and review of the fundamentals of listening, speaking, reading, and writing. Classroom emphasis on oral skills. Readings on culture. Students who intend to pursue a major or minor in Spanish must take SPAN 212 concurrently with this class. Students must demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language/Spanish.cfm](http://www.mnstate.edu/language/Spanish.cfm)). MnTC Goal 8.

### ***[SPAN 211] Intermediate Spanish Conversation I***

The conversational activities and assignments in this intermediate level class are intended to help students become more proficient in speaking Spanish. Students who intend to pursue a major or minor in Spanish must take SPAN 201 concurrently with this class. Students must demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language/Spanish.cfm](http://www.mnstate.edu/language/Spanish.cfm)). MnTC Goal 8.

### ***[SPAN 212] Intermediate Spanish Conversation II***

The conversational activities and assignments in this intermediate level class are intended to help students become more proficient in speaking Spanish. Students who intend to pursue a major or minor in Spanish must take SPAN 202 concurrently with this class. Students must demonstrate proficiency by taking the online

Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language/Spanish/cfm](http://www.mnstate.edu/language/Spanish/cfm)). MnTC Goal 8.

***[SPAN 290] Topics in Spanish Language Literature, and Culture***

Topics in Spanish language, literature, and culture. May be repeated since content may vary.

***[SPAN 297] Independent Study in Spanish - Intermediate Level***

Selected project as agreed upon by student and instructor. May be repeated for a total of 4 credits. Requires approval by department chair upon presentation of proposal.

***[SPAN 301] Spanish Grammar & Composition I***

Intensive study, practice, and review of Spanish grammar, vocabulary, and writing. Students who intend to pursue a major or minor in Spanish must take SPAN 311 concurrently with this class. Transfer students must demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language](http://www.mnstate.edu/language)).

***[SPAN 302] Spanish Grammar & Composition II***

Intensive study, practice, and review of Spanish grammar, vocabulary, and writing. Transfer students must take a placement exam before entering this course. Prerequisite: Span 301 or equivalent proficiency. Students may demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language](http://www.mnstate.edu/language)).

***[SPAN 311] Advanced Spanish Conversation I***

The conversational activities and assignments in this intermediate level class are intended to help students become more proficient in speaking Spanish. Students who intend to pursue a major or minor in Spanish must take SPAN 301 concurrently with this class. Transfer students must demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures ([www.mnstate.edu/language](http://www.mnstate.edu/language)).

***[SPAN 321] Iberian Culture and Civilization***

Coursework helps students develop awareness and understanding of the culture of Spain through the study of historical and geographical facts, art, political life, and general customs of the people. SPAN 302 or equivalent proficiency is a prerequisite. Students may demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages and Cultures.

***[SPAN 322] Latin American Culture and Civilization***

Coursework helps students develop awareness and understanding of the cultures of Latin America through the study of historical and geographical facts, art, political life, and general customs of the people of Latin America. SPAN 302 or equivalent proficiency is a prerequisite. Students may demonstrate proficiency by taking the online Spanish Placement Exam on the website of the Department of Languages & Cultures.

***[SPAN 340] Introduction to Spanish Literature***

Students learn the background of the literary genres and the terms used to study and explain them through close reading and analysis. The periods of Iberian and Latin American Literature are presented, giving students a historical context for their studies.

***[SPAN 341] Survey of Iberian Literature***

Analysis and discussion of major works of Iberian literature from one or more of the following periods: 1) origins to 1800; 2) 1800-1936; 3) 1936 to present.

***[SPAN 342] Survey of Latin American Literature***

Analysis and discussion of major works of Latin American Literature from one or both of the following periods: 1) Pre-Columbian to modernism; 2) modernism to the present.

***[SPAN 351] Spanish Phonetics and Phonology***

This course is designed to familiarize students with the articulation, production and perception of sounds in Spanish. The course will touch upon sound change and dialectology. Students will apply the principles learned in this class to the improvement of their pronunciation of Spanish.

***[SPAN 390] Topics in Spanish Language, Literature, and Culture***

Topics in Spanish language, literature, and culture. May be repeated since content may vary.

***[SPAN 397] Independent Study in Spanish***

Selected project as agreed upon by student and instructor. May be repeated for a total of 4 credits. Requires approval of department chair upon presentation of proposal.

***[SPAN 401] Advanced Spanish Grammar and Composition***

Intensive study, practice, and review of Spanish grammar, vocabulary, and composition. Students will develop writing skills through a variety of types of composition assignments designed to help them improve their overall writing proficiency in Spanish. May be repeated for credit.

***[SPAN 421] Advanced Iberian Culture and Civilization***

In-depth analysis and discussion of the culture and civilization of Spain.

***[SPAN 422] Advanced Latin American Culture and Civilization***

In depth analysis and discussion of the culture and civilization of Latin America.

***[SPAN 443] Genres and Themes of Iberian/Latin American Literature***

Analysis and discussion of genres and/or themes from Iberian and/or Latin American literature.

***[SPAN 444] Periods and Authors of Iberian/Latin American Literature***

Analysis and discussion of major periods and/or authors from Iberian and/or Latin American Literature.

***[SPAN 451] Survey of Spanish Linguistics***

Introduction to linguistics of Spanish: phonetics, phonology, morphology, syntax, semantics, history of the Spanish language, philology, dialectology, sociolinguistics, and psycholinguistics.

***[SPAN 461] Introduction to Spanish Translation I***

Theoretical foundations and introductory exercises. The course includes Spanish to English and English to Spanish translation.

***[SPAN 490] Topics in Spanish Language, Literature or Culture***

In-depth study of a selected topic in Spanish. May be repeated for credit. Applicable toward the Spanish major or minor.

***[SPAN 497] Independent Study in Spanish - Advanced Level***

Selected project as agreed upon by student and instructor. May be repeated for a total of 4 credits. Requires approval of department chair upon presentation of proposal.

**Special Education**

***[SPED 225] Individuals with Exceptionalities***

This course traces the path of disability laws beginning with the Civil Rights movement and preceding court cases and provides an introduction to the recognition, incidence, educational, and lifelong needs of individuals with exceptionalities. Personal and societal views regarding cultural and linguistic diversity will be explored. A wide range of educational services are studied with emphasis on the shared responsibility of all professionals in education, community, and professional settings, and introduces students to the wide-range of professionals involved with exceptional individuals.

***[SPED 402] Characteristics of Students with Mild Disabilities***

A study of definitions, identification, assessment, characteristics, educational strategies, and program models for children and youth with high-incidence, mild disabilities. The course will specifically focus on the high-incidence disabilities of Learning Disabilities, Emotional/Behavioral Disorders, High Functioning Autism, Mild Developmental/Cognitive Disabilities, and other mild disabilities such as Other Health Impairments and ADHD.

***[SPED 403] Methods: Mild Disabilities***

Course addresses teaching theories, strategies and techniques for teaching students with mild disabilities including Specific Learning Disabilities, Emotional/Behavioral Disorders, High Functioning Autism, Mild Developmental/Cognitive Disabilities and other related mild disabilities such as Traumatic Brain Injury and Other Health Impairments (ex: ADHD). Course covers teaching methods across specific content areas as well as assistive technology and other teaching practices(ex: co-teaching).

***[SPED 404] Best Practices in Teaching I***

This course represents the first in a sequence of two courses designed to deepen students' understanding of current educational best practices. Emphasis will be placed on systems utilized for prereferral and referral, including the use of data; common differentiated instruction practices such as Universal Design for Learning and positive behavior supports; and the development of collaboration and communication skills. Students will be expected to apply grade level content standards to classroom and individualized plans for instruction.

### ***[SPED 410] Methods and Strategies of Special Education Assessment***

This course will cover basic concepts of assessment and the assessment process and procedures that are utilized in data-based decision making and program planning for students with disabilities in an academic or functional curriculum. This course will provide students with the knowledge and skills necessary to select, ethically administer, score, interpret, and report results from various standardized and non-standardized assessment tools used in the field of special education as well as to utilize data for progress monitoring and educational decision making. This course will also review the legal and cultural contexts of assessment in special education.

### ***[SPED 410L] Special Education Lab***

Supervised practicum experience in middle school or high school special education setting. To prepare students to work at this level this lab will focus on teaching strategies and program analysis as well as strongly focus on assessment strategies. SPED 410 is to be taken concurrently. Prerequisite and concurrent course substitutions require instructor consent.

### ***[SPED 413] Best Practices in Teaching II***

This course is the second in a sequence of two courses focused on current best practices in teaching students with identified needs. The course places emphasis on the use of technology including assistive technology in a variety of instructional settings. Students will also expand their knowledge of instructional strategies and lesson planning connected to state and/or Common Core standards.

### ***[SPED 413L] Special Education Field Experience***

Course is taken concurrently with SPED 413: Best Practices in Teaching II. Students will complete a field experience in a special education setting. Focus of the field experience will be assessment, methods, and instructional environment.

### ***[SPED 414] IEP Policies and Methods***

This course will address key issues regarding the collaborative development of the Individual Education Plan (IEP). The IEP is the cornerstone of services for students identified as having a specific disability in need of special education services. Students will learn best practices for collaborative IEP development and creation. The development of a clearly written document including all parts of the IEP will be drafted and finalized into accurate, sound documents.

### ***[SPED 419] Biomedical Aspects***

This course is designed to help you understand medical aspects and terminology, human anatomy and physiology, pharmacology, kinesiology, neurology, secondary health care issues, accompany specific physical



and health disabilities, specific condition needs, managing personal physical care, first aid techniques, and evacuation procedures. Prerequisite substitutions require instructor consent.

### ***[SPED 430] Foundation of Reading and Writing Methods***

In this first of two literacy intervention courses, candidates will learn pedagogy that supports the development of reading and writing. By knowing and understanding the foundation of literacy & literacy instruction, candidates will begin to explore instructional practices, focusing on developing a holistic framework for teaching.

### ***[SPED 431] Survey of Autism Spectrum Disorders***

This course is designed to immerse the learner in text, research, and data describing the characteristics and defining qualities of Autism Spectrum Disorder. The significance of early identification and intervention across the five primary autism spectrum disorders will be analyzed. Best practices for intervention including collaboration, communication, and observation strategies will be introduced.

### ***[SPED 436] Communication Strategies & Social Skills for Students with ASD***

This course will focus on identifying and meeting the social and communication needs of students with Autism Spectrum Disorders. Course participants will learn to develop effective interventions and education strategies for teaching communication skills while addressing and supporting the development and the maintenance of social skills. Curriculum content will address skills across environments.

### ***[SPED 443] Consultation and Collaboration in Special Education and Human Services***

Understanding and development of professional consultation and collaboration skills to initiate and apply appropriate and effective teaming techniques for assessment, intervention, and evaluation via transdisciplinary approaches for special needs students/clients and their caregivers. This course should be taken concurrently with Practicum course or Student Teaching.

### ***[SPED 445] Methods of Reading Intervention***

Second in a series of two methods courses where candidates will learn and apply knowledge and pedagogy that support the development of reading and writing in children with disabilities. By knowing and understanding the premise of literacy development and intervention, candidates will explore effective instructional, assessment, and intervention practices.

### ***[SPED 447] Physical & Health Disabilities***

This course is designed to provide you with up-to-date information on the needs of the students in your school who have experienced periods of poor health or physical adversity. This course provides you an understanding of how students' illnesses or disabling condition affect their everyday lives. Prerequisite substitutions require instructor consent.

### ***[SPED 451B] Student Teaching: SLD***

Student teaching in public school settings for pupils with specific learning disabilities. Prerequisite substitutions require instructor consent. Licensure coursework must be completed prior to enrollment in this course.

***[SPED 451C] Student Teaching: E/BD***

Student teaching in public school setting for pupils with Emotional/Behavioral Disorders. Prerequisite substitutions require instructor consent. Licensure coursework must be completed prior to enrollment in this course.

***[SPED 451D] Student Teaching: Developmental Disabilities***

Student teaching in public school elementary or secondary setting for pupils with mild/moderate disabilities. Prerequisite substitutions require instructor consent. Licensure coursework must be completed prior to enrollment in this course.

***[SPED 455] Characteristics of Students with Learning and Behavior Problems***

A study of definitions, identification, assessment, characteristics, educational strategies, and program models for children and youth with learning disabilities and/or emotional/behavior disorders.

***[SPED 456] Functional Curriculum and Assessment***

The purpose of this course is to develop an understanding of individuals with developmental disabilities as well as a functional, life-skills orientation to assessment and curriculum that involves both academic and life skills instruction. Students will perform both informal and formal assessment, write an assessment report, and develop curriculum which allows for integration of students with identified cognitive impairments. Prerequisite substitutions require instructor consent.

***[SPED 459] Communication Programming for Persons with Severe Disabilities***

This course covers issues related to communication program and decision-making models for communication programming for individuals with severe disabilities. The emphasis is on assessing an individual's communication skills, selecting appropriate components for the communication system and planning intervention strategies. Prerequisite substitutions require instructor consent.

***[SPED 463] Assessment Strategies***

Assessment of scholastic achievement and aptitude, social behavior, and instructional effectiveness through the use of norm referenced individualized test instruments and informal instructor designed procedures. Course includes report writing, establishment of objectives, participation in the development of IEPs, and review of basic statistical and measurement concepts.

***[SPED 463L] Assessment Lab***

Field experience in assessment and remediation of students with disabilities. This course should be taken concurrently with SPED 463.

***[SPED 467A] Secondary Practicum: Mild Disabilities***

Directed practicum experience in secondary level special education resource room setting. Students will spend 225 hours in schools. SPED 464 is to be taken concurrently. Concurrent course substitutions require instructor consent.

***[SPED 467D] Secondary Practicum: Developmental Disabilities***

Directed practicum experience in secondary level special education resource room setting. Students will spend approximately 15 hours per week in schools.

***[SPED 468B] SLD Middle/Secondary Competency Based Field Experience***

Directed student teaching at the secondary level in special education SLD Program. Students will spend the equivalent of four weeks, full time in a middle school or secondary setting. STL 451 Student Teaching Elementary (8) is taken concurrently for dual majors. Prerequisite or concurrent course substitutions require instructor consent of the SLD licensure coordinator.

***[SPED 468C] E/BD Middle/Secondary Competency Based Field Experience***

Directed student teaching at the secondary level in special education E/BD Program. Students will spend the equivalent of four weeks, full time in a middle school or secondary setting. STL 451 Student Teaching Elementary (8) is taken concurrently for dual majors. Prerequisite or concurrent course substitutions require instructor consent of the E/BD licensure coordinator.

***[SPED 468D] DD Middle/Secondary (Severe) Competency Based Field Experience***

Directed student teaching at the secondary level in special education DD Program for students with severe developmental disabilities. Students will spend the equivalent of four weeks, full time in a middle school or secondary setting. STL 451 Student Teaching Elementary (8) is taken concurrently for dual majors. Prerequisite or concurrent course substitutions require instructor consent of the DD licensure coordinator.

***[SPED 468M] ABS Competency Based Field Experience***

Directed student teaching at the elementary, middle or high school level. Students will spend five to eight weeks, full time in an appropriate setting that addresses the needs of students relevant to the Academic Behavior Strategist License. STL 451 Student Teaching Elementary is taken concurrently for dual majors. Prerequisite or concurrent course substitutions require instructor consent of the ABS licensure coordinator.

***[SPED 469] Internship***

Directed field experience working with individuals with disabilities. Prerequisite substitutions require consent of the faculty advisor. A maximum of 12 internship credits may be applied to the degree.

***[SPED 470] Secondary Services & Transitional Planning***

Transitional planning for secondary students with disabilities including transitional assessment, programming and planning based on individual cognitive, affective and behavioral characteristics will be covered in depth in this course. Students will also acquire knowledge of post-secondary service options and funding sources.

### ***[SPED 471] Behavior and Environment Management***

Application of learning theory and applied behavior analysis to teaching and to the problem of altering maladaptive behavior. Specific variables related to classroom and community based instruction of individuals with a variety of learning characteristics are included. Prerequisite substitutions require instructor consent.

### ***[SPED 475] Informal Assessment/Teaching Strategies: Students with Learning Disabilities***

Informal assessment techniques and teaching strategies across the core content areas and in social skills for elementary and secondary students with specific learning disabilities. Prerequisite substitutions require instructor consent.

### ***[SPED 478] Educational Interventions: Emotional/Behavioral Disorders***

Program design, intervention techniques, and management strategies for student with Emotional/Behavioral Disorders. Prerequisite substitutions require instructor consent.

### ***[SPED 480] Legal/Social Foundations of Special Education***

This course overviews the educational, sociological, legal, and historical frameworks of special education services within the context of public school systems. It includes research on the efficacy of special education; national and state reform and renewal efforts in general and environment professional preparation, litigation and legislation, and best practices in curriculum for all learners. Issues related to families in a changing educational system are also addressed. Prerequisite substitutions require instructor consent.

### ***[SPED 490] Topics in Special Education***

Advanced treatment of selected topics. Prerequisite substitutions require consent of the instructor.

### ***[SPED 495] Special Problems***

Directed field experience, reading, or research in special education. May be repeated up to 6 credits. Prerequisite substitutions require consent of the faculty advisor.

### ***[SPED 497] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

## **Speech/Language/Hearing Sciences**

### ***[SLHS 101] Survey of Speech-Language-Hearing Disorders***

The study of the basic anatomy and physiology of speech and hearing including basic acoustics. Overview of the processes of speech, language and hearing, the normal development of speech and language in children, and the major speech, language and hearing disorders. The role of speech-language pathologists and audiologists will be discussed.

### ***[SLHS 150] Observation of the Practice in Speech Language and Hearing Sciences***

Observation of the Practice in SLHS provides the opportunity for observation hours as required by the American Speech and Hearing Association. The SLHS 150 course supports guided observation to increase the understanding of what may be observed in the practice of Speech Language and Hearing Sciences, why it is relevant and how

***[SLHS 201] Linguistic Phonetics***

The science and theory behind the production and perception of the sounds of the English language; Introduction to Clinical and Linguistic Phonetics; the use of the International Phonetic Alphabet (IPA) including vowel and consonant symbols, diacritical markings, and stress/intonation; application of phonemic analysis and an introduction to phonology and phonological principles including discrimination of normal and disordered sound productions; Introduction to anatomy and physiology of sound production.

***[SLHS 202] Anatomy and Physiology of Normal Speech and Hearing***

The study of the anatomy and basic physiology of the speech and hearing mechanisms, and the major underlying scientific concepts.

***[SLHS 204] Language Development***

Nature and normal development of cognitive, linguistic and social systems of language in children.

***[SLHS 290] Topics in Speech/Language/Hearing Sciences***

Exploration of a specific Speech Language Hearing Science topic. This course may be repeated as topic varies.

***[SLHS 301] American Sign Language and Deaf Culture I***

An introduction to the Deaf culture and American Sign Language, including issues of nonverbal communication through pantomime and body movement. MnTC Goal 8.

***[SLHS 320] Hearing/Vestibular Disorders & Assessment***

The study of auditory/vestibular anatomy and physiology as well as the disorders of the auditory and vestibular system. Clinical measurement of the auditory and vestibular mechanisms. In-class and assignment experience administering protocols for testing and screening the auditory pathway.

***[SLHS 321] Speech Sound Disorders in Children***

The nature, etiology, assessment and treatment of disorders of articulation and phonology.

***[SLHS 322] Language Disorders in Children***

The nature, etiology, assessment, and treatment of language disorders in children.

***[SLHS 343] Clinical Procedures***

Basic defining and recording of communication behavior; development of reporting skills to include lesson plans, report writing, and conferring and consulting with clients and other professionals. During this course,

students will learn the components of evaluation and progress report writing for a variety of communication disorders. In addition, given a set of specific information, students will learn to develop treatment plans and lesson plans based on logical interpretation of data. Writing Intensive Course.

***[SLHS 402] Neuroanatomy/Physiology of Communication and Swallowing***

The study of the Central, Peripheral, and Autonomic Nervous Systems. Neuroanatomy and Physiology of Swallowing, Speech, Language, Hearing, Somatosensory System, and the Primary Sensory and Motor Cortices. Introduction to Dysphagia, Aphasia, Dysarthria, Apraxia, Traumatic Brain Injury and the Neuroanatomy affected by these conditions as they relate to the work of the Speech-Language Pathologist, Speech Scientist, and Audiologist.

***[SLHS 421] Speech and Voice Science***

The study of speech acoustics and physiology, incorporating both voice and articulatory aspects of speech signal production, as well as the instrumentation needed for measurement of speech acoustic signals.

***[SLHS 424] Childhood Stuttering and Related Disorders***

A study of the theories of disfluency, fluency development and stuttering in children. Assessment, prevention and treatment of childhood stuttering and cluttering is included. Special consideration will be given to children with Downs syndrome and Attention Deficit and Hyperactivity Disorder (ADHD).

***[SLHS 427] Augmentative and Alternative Communication and Literacy Acquisition***

The nature of augmentative and alternative communication (AAC) systems and other assistive technologies for persons with special needs across the life span. Includes components of AAC systems, and basic assessment and intervention procedures. Additionally, includes an overview of typical literacy acquisition.

***[SLHS 446] Clinical Experience***

Supervised clinical experience in speech/language pathology or audiology with children or adults. May be repeated.

***[SLHS 448] Professional Issues and Clinical Practice Management***

The course will include a survey of professional issues facing today's professional including such topics as credentialing, ethics and legal considerations. Service delivery in schools, health care and private practice will also be addressed.

***[SLHS 473] Rehabilitation Audiology***

A survey of the principles of audiological and vestibular intervention for children through adults. Special emphasis on amplification technology.

***[SLHS 482] Medical Speech-Language Pathology***

An introduction to the speech-language pathologist's role in medical-based services. Topics of focus include service areas, descriptions of medical teams, discussing the diagnosis, and management for specialized

populations, education/counseling for staff, patients, and families, documentation options, insurance/billing considerations and other topics of concern to the hospital-based clinician.

***[SLHS 490] Topics in Speech/Language/Hearing Sciences***

An examination of the literature on a selected topic of current interest.

***[SLHS 491] Research Applications in SLHS***

The study and application of research principles and methods in speech-language and hearing sciences. Students may, with departmental permission, substitute another statistics course for the listed prerequisite.

***[SLHS 497] Independent Study***

Selected readings or a guided independent research project in some aspect of communication disorders. May be repeated for up to 6 credits.

**Sustainability**

***[SUST 200] Nature of Sustainability***

This course explores the concept of sustainability within the context of socio-environmental systems and examines topics of study from an individual perspective. Individual connections to sustainability issues within business, politics, and the social and natural sciences will be introduced. The tradeoffs (environmental, social, and economic) associated with generating and using various resources will be examined, including a recognition that all individuals do not have the same ecological footprint. Evaluating these tradeoffs requires a level of competency in information literacy, including identifying credible sources, and the development and application of logic and argumentation skills. Finally, we will explore what actions are possible to work towards a sustainable future. MnTC Goal 2.

***[SUST 290] Topics in Sustainability***

Consideration of special problems or the study of sustainability topics at an introductory level. May be repeated for credit when topic varies.

***[SUST 390] Topics in Sustainability***

Consideration of special problems or the study of sustainability topics at an advanced level. May be repeated for credit when topic varies.

***[SUST 394] Sustainability Research***

Individual research: The project and its format must be accepted by the research advisor prior to registration. Course is repeatable, but only a total of 3 credits may count towards sustainability electives for the major.

***[SUST 421] Systems Thinking***

This course develops your ability to interpret any environmental issue within a systems thinking framework. Using a systems approach we will explore current trends and discuss future scenarios from a local to a global

scale. A global perspective is essential to understanding the complexity of the Grand Societal Challenges facing our planet. MnTC Goal 8.

### ***[SUST 432] Environmental Dilemmas***

This course examines a series of case studies of environmental issues at the local, regional, and global levels that present complex dilemmas for humans to address. Potential solutions are viewed in the context of individual or societal ethical practices and moral obligations to other humans, non-human organisms, physical environments, and future generations. An introduction to moral theories and the examination of a variety of approaches to environmental ethics, such as anthropocentrism, bio/ecocentrism, deep ecology, ecofeminism, social ecology, and Leopold's land ethic will provide the foundation for discussions of the case studies. MnTC Goal 9.

### ***[SUST 469] Internship***

A supervised work experience generally involving a field in which the student can apply their sustainability knowledge. Work experience may be in the private, non-profit, non-governmental or governmental sector. Course is repeatable, but only a total of 3 credits may count towards the sustainability major. A maximum of 12 internship credits may be applied towards your MSUM degree.

### ***[SUST 492] Seminar: Sustainability Capstone***

This course serves as a capstone course for sustainability majors during their internship experience to help them prepare for a successful postgraduate career experience.

## **Teaching English as a Foreign Language**

### ***[TEFL 101] Oral Presentations I***

This course requires students to move beyond interactive speaking contexts to presentation situations. Students begin with short presentations that are embedded within a larger group structure, such as an information point in a business meeting or an argument in a debate. Students then move to longer presentations of an informative or instructional nature. B or higher in ELP 302 OR Placement test and instructor permission required.

### ***[TEFL 102] Lectures & Note-taking I***

This course builds on the initial skills of listening to English in formal settings that began in ELP 302 and moves them to develop the ability to listen to academic lectures. Students will continue to track the developments of formal discussions by taking minutes of business meetings, then move to the taking of notes from short informational and instructional speeches. They will then work with longer and longer lectures. B or higher in ELP 302 OR Placement test and Instructor permission.

### ***[TEFL 103] Academic Reading I***

TEFL 103 has students reading longer texts and more authentic texts than previously encountered, introducing them to the reading of textbooks for classes in various subjects in English. Students will read narrative history texts, literary prose texts, literary poetic texts, and expository texts in various disciplines. B or higher in ELP 203 OR Placement test and Instructor permission.



### ***[TEFL 104] Academic Writing I***

TEFL 104 builds on lessons learned in ELP 204 and focuses even more directly on the types of writing expected of students in college courses in American universities. Students will learn about informal writing assignments used in college courses, such as free-writing activities and response papers. Students will also learn about expectations for written exams, both short answer test items and essay test item expectations. Finally, students will revisit the characteristics of essays that are to be written outside of class and understand how to analyze an essay prompt and rubric to learn instructor expectations for papers and lab reports. B or higher in ELP 204 OR Placement test and Instructor permission.

### ***[TEFL 105] Advanced English Syntax I***

TEFL 105 develops student knowledge and understanding of complex syntactic features of English. Students will encounter complex syntactic patterns and practice them in all four skill areas with particular emphasis on comprehending the meanings of these forms in written texts. In addition, more difficult aspects of verb forms and other categories will be addressed. B or higher in ELP 205 OR Placement test and Instructor permission.

### ***[TEFL 106] Vocabulary for Subject Studies I***

TEFL 106 moves students' vocabulary abilities from the general academic word list to studying the ways words are given specialized meanings in different academic disciplines. Focus is given to learning basic vocabulary for studying within the broad subject-based disciplines of mathematics and science. The vocabulary learned will provide assistance as students begin to take liberal arts and sciences courses for their bachelor degrees. B or higher in ELP 206 OR Placement test and Instructor permission.

### ***[TEFL 107] American Childhood Classics***

TEFL 107 introduces students to texts in all language domains that many, if not most, Americans encountered in childhood and provides background information on the period when the piece was created. Students will learn more characteristics that distinguish textual genres and will practice language in all domains. Students will comprehend texts at the literal, reorganization, inference, and evaluation levels on Barrett's scale of comprehension by applying knowledge and skills developed in previous courses. B or higher in ELP 307 OR Placement test and Instructor permission.

### ***[TEFL 201] Oral Presentations II***

This course continues to develop the formal presentation skills that were initially established in TEFL 101. This course requires students produce presentations in English with various content and organizational patterns. C or higher in TEFL 101 OR Placement test and instructor permission required.

### ***[TEFL 202] Lectures & Note-taking II***

This course builds on the skills of listening to English in academic lectures. Students will continue to build their skills by taking notes while listening to authentic lectures from actual college level courses. Lectures will be presented face-to-face, on DVD, and on CD. C or higher in TEFL 102 OR Placement test and Instructor permission.

### ***[TEFL 203] Academic Reading II***

TEFL 203 has students reading authentic texts used in college freshman level courses, introducing them to the reading of textbooks for classes in various subjects in English. Students will read narrative history texts, literary prose texts, literary poetic texts, and expository texts in various disciplines. C or higher in TEFL 103 OR Placement test and Instructor permission.

### ***[TEFL 204] Academic Writing II***

TEFL 204 continues the focus on the types of writing expected of students in college courses in American universities. Students will learn about reading various sources against each other and writing a paper to present and discuss the results of the analysis. High focus will be given to the concepts of agreement, disagreement, validation, refutation, expansion, and exemplification as ways information from various sources can relate together. High focus on proper citation, quotation, summarizing, and paraphrasing will also be included. Conducting research to locate various sources may be introduced. C or higher in TEFL 104 OR Placement test and Instructor permission.

### ***[TEFL 205] Advanced English Syntax II***

TEFL 205 develops student knowledge and understanding of complex syntactic features of English. Students will encounter complex syntactic patterns and practice them in all four skill areas with particular emphasis on using appropriate syntactic forms to convey meaning in written discourse. C or higher in TEFL 105 OR Placement test and Instructor permission.

### ***[TEFL 206] Vocabulary for Subject Studies II***

TEFL 206 continues students' vocabulary development by studying the ways words are given specialized meanings in different academic disciplines and in literary texts. Focus is given to learning basic vocabulary for studying within broad subject-based disciplines of the arts and social sciences. The vocabulary learned will provide assistance as students begin to take liberal arts and sciences courses for their bachelor degrees. B or higher in ELP 306 OR Placement test and Instructor permission.

### ***[TEFL 207] American Cultural Classics***

TEFL 203 introduces students to texts in all language domains that many, if not most, Americans have encountered and provides background information on the period when the piece was created. Students will approach texts with purpose and with strategies to assist them. Students will comprehend texts at the literal, reorganization, and inference levels on Barrett's scale of comprehension by applying knowledge and skills developed in previous courses. C or higher in TEFL 107 OR Placement test and Instructor permission.

## **Teaching English as a Second Language**

### ***[TESL 451] English Structures***

An overview of English as a linguistic system with comparison to other languages and a survey of the history of English. Includes phonetics, phonology, morphology, syntax, semantics, pragmatics, sociolinguistics, historical linguistics, language acquisition, and the application of these areas of knowledge to the ESL classroom.

### ***[TESL 454] Grammar for Teaching English as a Second Language***

In-depth study of English grammar with specific focus on syntax, including its application to the ESL classroom.

### ***[TESL 455] Oral Discourse Structures***

In-depth study of how English is structured in oral contexts as well as methods and strategies for teaching oral language. Covers a review of phonetics and phonology including place and manner of articulation of phonemes, stress, intonation, and how articulation alters when sounds are produced within larger units of discourse. Delves into the structure of oral discourse above the sentence, including such features as adjacency pairs, referencing and gapping, and how participants negotiate meaning. Introduces students to techniques used in oral discourse analysis.

### ***[TESL 456] Written Discourse Structures***

In-depth study of the writing system of English as well as methods and strategies for teaching reading and writing. Covers the alphabet and its relation to the oral language, the teaching of early literacy, developmental literacy, and advanced writing skills. Delves into the structure of written discourse above the sentence, including such features as logical connectors, focusing structures, transitions, and rhetorical devices.

### ***[TESL 473] Teaching Math and Science to ELs***

The course will look at state guidelines and designated responsibilities of both ESL teachers and teachers of other subjects in the education of ELs and then present readings, discussions, and assignments that help math and science teachers fulfill their designated responsibilities. Students will learn general difficulties faced by ELs in a core subject classroom and the specific challenges presented in the math and science classrooms as well as ways to help these learners overcome these difficulties.

### ***[TESL 490] Topics in Teaching English as a Second Language***

Topics in TESL

## **Theatre Arts**

### ***[THTR 102] Theatre Activity***

Practical experience in a performance activity in Theatre.

### ***[THTR 130] Acting for Everyone***

Acting for Everyone is a participation course that introduces the student to the fundamental craft of the stage actor. Students will engage in theatre games, solo, duo, and group acting scenes, and will learn basic theatrical vocabulary. Emphasis is placed on creating truthful, vivid interaction on stage, through developing the skills of listening, responding, concentration and engaging the imagination. MnTC Goal 6.

### ***[THTR 140] Dance for the Stage I***

A beginning course in dance technique for dance styles in musical theatre, including dance forms of jazz and ballet.

### ***[THTR 141] Ballet I***

This course will serve as an introduction to ballet dance technique.

***[THTR 142] Tap I***

This course will serve as an introduction to tap dance technique.

***[THTR 190] Topics in Theatre***

This is a lower division topics course and may be repeated when the topic changes.

***[THTR 196] First Year Seminar***

The First Year Seminar course for Theatre Arts majors focuses on requirements in theatre, auditioning, the production season, and a showcase of talents.

***[THTR 202] Practicum***

Practical experience in a performance activity in Theatre.

***[THTR 221] Introduction to Dramatic and Theatrical Analysis***

An examination of great plays, dramatic structure and styles, plays in performance, selected theatre history, and playwriting. For theatre majors and minors and by permission of the instructor.

***[THTR 230] Acting I: Principles***

Basic terminology and techniques used by the actor in creating a role for the stage.

***[THTR 231] Auditioning***

Students will prepare for all types of theatrical auditions. The class will cover topics such as: resume preparation, cold reading, headshots, piece selection and the business of theatre.

***[THTR 232] Principles of Make-up for Stage and Film***

Techniques and styles of make-up used in stage and film productions. Same as FILM 232.

***[THTR 234] Theatrical Design Principles***

Theatrical Design Principles focuses on basic principles and elements of design within the theatre. Students will develop skills needed to communicate their ideas through design.

***[THTR 235] Directing I: Principles***

The foundation course in stage direction, a core requirement for all majors. The theory and practice of directing: casting, blocking, composition, picturization, movement, rehearsal and performance.

***[THTR 240] Dance for the Stage II***

A continuation of skills amassed in "Dance for the Stage I." A special unit of tap is included.

***[THTR 255] Stagecraft***

The theory and practice of working with stage equipment; the methods and procedures of scenery construction, stage rigging, and scene shifting.

***[THTR 290] Topics in Theatre***

This is a lower division topical course and may be repeated when the topic changes.

***[THTR 302] Practicum***

Practical experience in a performance activity in Theatre.

***[THTR 322] Survey of Western Theatre History and Drama***

Theatre and drama from Classical Greece through contemporary times. Topics include a selection of great plays, significant playwrights, theatre buildings, staging and technical innovations, Aristotelian criticism, theatre buildings, staging and technical innovations, and artistic and cultural movements.

***[THTR 324] Musical Theatre History***

Musical Theatre productions past and present are examined and critically evaluated. An analysis of the various forms of musicals with an emphasis on the libretto, lyrics, and production elements. Same as Music 324.

***[THTR 325] African American Theatre***

Survey of selected plays by African American writers from the 19th and 20th centuries. Focus on aesthetic and interpretive dimensions grounded in African American historical and cultural contexts. AMCS 210 or AMCS 211 are highly recommended as prerequisites.

***[THTR 331] Acting II: Scene Study***

As a follow-up to Principles of Acting, students in Scene Study will rehearse and perform scenes from the dramatic canon of great plays. The scene work will be performed as an actors' lab with regular feedback from the instructor and fellow classmates.

***[THTR 332] Advanced Make-up***

The study of special makeup effects for stage and screen, including making and applying prosthetics.

***[THTR 333] Movement for the Actor***

A physical approach to acting will be explored through Alexander, Laban, stage combat, and other movement methodologies.

***[THTR 334] Voice for the Actor***

Voice for the actor focuses on vocal techniques. The course explores voice production: breathing, projection, articulation, diction, IPA, and dialects.

### ***[THTR 340] Principles of Choreography***

Adaptation of choreographic assignments, in-class critiques, and analyses permit students to evolve a personal, original style and process associated with the role of choreographer.

### ***[THTR 341] Ballet II***

This course will serve as advanced study in ballet dance technique.

### ***[THTR 342] Tap II***

This course will serve as advanced study in tap dance technique.

### ***[THTR 350] Costume Studio***

Costume Studio explores theatrical costume design and construction. THTR 234 Theatrical Design Principles is recommended as a prerequisite.

### ***[THTR 356] Lighting Studio***

Acquiring artistic and technical skills needed for designing lighting for the theatre; practical experience in design presentation. THTR 255 Stagecraft is recommended as a prerequisite.

### ***[THTR 360] Dramatic Production I***

Play production techniques (acting and directing, technical theatre) through the process of staging weekly productions for summer theatre audiences. May be repeated by undergraduates. Offered summer only.

### ***[THTR 390] Topics in Theatre***

This is an upper division topical course and may be repeated when the topic changes.

### ***[THTR 397] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

### ***[THTR 402] Practicum***

Practical experience in a performance activity in Theatre. This course may be repeated for a max of 12 credits, only 3 credits may be applied to the major.

### ***[THTR 420] The Theatrical World***

This course will explore the theatre from Europe and Asia, with special emphasis on the theatre of Classical Greece, India, China, Japan, and American Musical Theatre. Students will read plays, materials about theatre, see videos of theatre productions, and make group presentations. MnTC Goal 6 and 8.

### ***[THTR 425] Contemporary Playwrights***

Significant playwrights and their works from the last 25 years. May be elected twice when the reading lists are substantially different.

***[THTR 430] Acting Styles***

Principles and problems in the acting of major historical and theatrical styles (for example, Classical, Renaissance, and Modern). May be repeated for credit when the style focus is substantially different.

***[THTR 431] Design and Technology Styles***

Principles and problems in design and technology styles (for example, tailoring, scenic painting, rendering techniques). May be repeated for credit when the style focus is substantially different.

***[THTR 434] Special Projects in Theatre Arts***

Opportunity for the advanced student to do individual creative or investigative work in a particular phase of theatre. May be taken more than once if content is substantially different. Offered on demand.

***[THTR 436] Directing III: Advanced***

Advanced study of techniques of direction through the use of movement, picturization, tempo and script analysis.

***[THTR 440] Dance Production***

The course explores theory and practice in the productions aspects of dance. Students in the class will be required to rehearse and perform dances choreographed by faculty or visiting guest artists, and perform in the annual spring dance concert. This course must be repeated for a total of 4 credits for the Minor in Theatre Dance.

***[THTR 450] Scenic Studio***

Explore different types of stage settings: different styles, designing for different types of theatre spaces, and different approaches to the genres of dramatic literature. Offered on demand.

***[THTR 460] Dramatic Production II***

Play production techniques (acting and directing, technical theatre) through the process of staging weekly productions for summer theatre audience. May be repeated by undergraduates. Offered summer only.

***[THTR 469] Internship***

A supervised practical experience in theatre. A maximum of 12 internship credits may be applied to the degree.

***[THTR 490] Topics in Theatre***

This is an upper division topical course and may be repeated when the topic changes.

### ***[THTR 492] Professional Seminar***

Capstone course for Theatre Arts majors; proposal, completion, and presentation of projects; pre-professional skills; written exam integrating and applying knowledge from separate courses. Grade of "C-" or higher is required for graduation.

### ***[THTR 497] Independent Study***

Independent reading or research allowing an individual student to explore a specific topic under faculty supervision.

## **University Studies**

### ***[UNIV 111] College Learning Strategies***

The purpose of this course is to provide students with an opportunity to learn and to adopt methods of studying and thinking which facilitate academic success in higher education.

### ***[UNIV 121] Foundations of University Success***

This course is designed to help students develop the critical thinking skills needed for both academic and personal success. Through discovery and self-assessment, students will apply the methods of motivation, goal-setting, study skills, learning styles, problem solving and time management to achieve their college goals. MnTC Goal 2.

### ***[UNIV 122] Individual Strategies for University Success***

This course is designed to help the student develop and utilize an individualized plan of action for academic success and accountability. Students will learn academic strategies and develop effective study habits to improve academic performance.

### ***[UNIV 131] Career/Life Planning***

This course is intended to help students assess their values, interests, skills, and temperament and relate them to career choices. Through self-assessment and career information research, the student will be able to identify a broad base of career options and describe a variety of career goals. Students will acquire tools with which to make decisions and plans regarding major and future career choice.

### ***[UNIV 141] Assertiveness Training***

This course is designed to enable students to learn their interpersonal rights and responsibilities, to discriminate between assertive, aggressive and submissive behavior and to acquire a set of assertive skills that, by definition, maintain the dignity of the parties involved.

### ***[UNIV 143] Emotional Intelligence***

In this course students will learn why Emotional Intelligence (EI) may be more important to their academic and career success than traditional IQ. Students will be introduced to several theories of EI and its component



skills. Opportunities to self-assess personal levels of EI will be provided and students will identify strategies to enhance their own EI skill sets.

### ***[UNIV 145] Stress Management***

In this course students will explore the sources and effects of stress. They will identify societal pressures and personal choices that lead to stress disease and learn the physiological effects of stress on an individual's health. Students will identify current and potential sources of stress in their own lives and learn stress management techniques to develop a stress resistant lifestyle.

### ***[UNIV 340] Learning Assistant Program Seminar***

This seminar is designed for students who are either currently serving as a Learning Assistant (LA) or are planning on applying to become an LA in the future. Seminar topics provide pedagogical help for LAs to enable them to support and facilitate active learning by the students in their assignments.

### ***[UNIV 490] Topics in University Studies***

Topics in University Studies

## **Women's Studies**

### ***[WS 100] Women Today: Contemporary Women's Issues***

This course will examine current issues affecting women in American Society. It also addresses pertinent topics related to gender, diversity and systems of inequality. Topics include women and work, family, law and social policy, gender and mass media, violence against women, sexuality and the body, and women's health. Core class for Women's Studies Minor program. MnTC Goal 6 and 7.

### ***[WS 219] Sociology of Sexual Behavior***

Examines sociological and social psychological perspectives and research on sexual behavior. Topics include childhood sexual behavior, adolescent sexual behavior, sex and mate selection, marital sex, extramarital sex, and various forms of sexual variation. Same as SOC 219.

### ***[WS 244] Women in World Religions***

This course will survey how gender power and control is represented in various cultural belief systems and expressed in religious practices. The class will stress the concepts of utilizing social norms and historiographical theory in order to analyze human behaviors. The class will also explore the concept of "cultural heritage" and will investigate how it affects the student's personal worldview, values and assumptions. In order to accomplish this goal, the students will be introduced to a wide variety of primary and secondary source documents as well as examples of material culture, and will be expected to provide written analysis of these items. (Same as HIST 344) MnTC Goal 7.

### ***[WS 246] Women in Literature***

A study of the various ways women are depicted in imaginative literature and expository prose. Readings vary. Same as ENGL 246. MnTC Goal 6.

### ***[WS 247] Women's Studies: Perspectives and Intersections***

An introduction to the discipline of Women's Studies. Examines multidisciplinary and interdisciplinary issues in Women's Studies in relation to the sciences, social sciences, humanities and arts. Also investigates disciplinary topics such as women's movements, difference, oppression, race and class. Includes a service learning component. Core class for Women's Studies minor program. MnTC Goal 6 and 7.

### ***[WS 268] Global Sexualities in Pop Culture***

This course traces the popular representations of diverse sexual and gender identities in a global context. We will explore the cultural constructions of sexuality and gender in mainstream, independent, and feminist film, television, print media, fashion, music and material culture from the perspective of the local and global through the lenses of their cultural, social, political, and ideological functions. Our emphasis will be on contemporary popular cultures in Asia, Africa, the Americas, and Europe through theories of sexuality, gender, race, and the workings of power in global culture industries. Course fulfills Arts and Humanities Area requirement in WGS major or restricted elective in WGS major or minor. MnTC Goal 6 and 8.

### ***[WS 300] Biology of Women***

A study of the gender-related aspects of the biology and behavior of women, including a critical examination of research in this field. Appropriate as an elective only for Biology majors who choose the Health and Medical Science emphasis or the Life Science Emphasis. Lab included. Same as BIOL 300. MnTC Goal 3.

### ***[WS 303] Cross Cultural Gender***

A survey of gender roles in various cultures. This class examines the relationship of gender to kinship, economics, political and biological factors. It also addresses culture change and the effect on gender role assignments. Same as ANTH 303.

### ***[WS 305] The Economics of Poverty, Discrimination, and Inequality***

An examination of poverty, discrimination, and income inequality among diverse populations in the United States. Topics include causes of poverty, economics of discrimination in terms of majority and minority groups, and historical perspective of ethnic minorities. Same as ECON 305. MnTC Goal 7.

### ***[WS 308] Social Gerontology***

This course introduces students to the field of social gerontology for providing an overview of the significant sociological perspectives, social issues, and empirical social science research pertaining to the phenomenon of aging in society. The main goal of the course is to foster an understanding of aging as a process that is characteristic of both individuals and societies through a focus on social factors that shape the individual's experience of aging and the consequences of an aging population for social institutions. Same as SOC 308.

### ***[WS 310] Dominant-Subordinate Group Relations***

Theoretical, historical and contemporary examination of prejudice, discrimination, and inequalities organized around race, ethnicity, and gender divisions. Same as SOC 310.

### ***[WS 312] Rhetorics of Resistance: Feminist Responses from the Humanities***

An examination of feminist responses from the humanities including literature, history, visual and performing arts as well as creative work from the traditional world of women. The course incorporates responses from various multicultural perspectives. MnTC Goal 6 and 7.

***[WS 320] Sociology of the Family***

Examines the theoretical issues and research findings pertaining primarily to American family life. Topics include dating and mate selection, alternatives to traditional marriages, marital structure and interaction, and marital dissolution. Same as SOC 320.

***[WS 324] Feminist Theory***

This course is an examination of feminist theories that analyze women's experiences and women's oppression. Throughout the course we will explore how knowledge, power, gender, and difference are interwoven and how feminist approaches seek to disrupt and reshape systems of inequality on multiple levels. Specific attention will focus on theorizing the intersections of gender-based oppression with racism, classism, and other forms of oppression. MnTC Goal 6 and 7.

***[WS 330] Gender, Justice and the Environment***

The course focuses on understanding and identifying solutions to local and global environmental issues in the context of feminist critique. The course will draw from feminist literature, core ecological principles, activist strategies, and other critical writings. MnTC Goal 6 and 10.

***[WS 333] Sociology of Gender***

Focuses on the social construction of gender and consequences of gender stratification for women and men. Topics may include: gender differences; the concept of "gender role"; gender in the economic, political, and educational institutions; discrimination; and the feminist movement. Same as SOC 333.

***[WS 345] Women in Musical Culture***

A history of women in musical culture and critical examination of representations of women in music. Topics examine women's roles in American and European musical cultures, including artistic traditions, popular musics, jazz and folk traditions. Representations of women in musical forms, such as opera, rock music and multimedia, are also considered. MnTC Goals 6 and 7.

***[WS 346] Sex, Sexuality and Music***

This course considers representations and expressions of sex and sexuality in music throughout history in artistic and popular music traditions in Western society. Various musical forms will be considered in sociohistorical context. Musical works will be examined and interpreted for their expression of ideas about sexuality, representations of sexuality, and the ways in which they enhance or challenge social norms or stereotypes about sexuality. Music as a means of expressing sexuality will also be considered. MnTC Goals 6 and 7.

***[WS 350] Women in European History***

The historical experience of European women as a force in politics, in economic and familial roles, in organized religion and in cultural life, and with special emphasis on the "woman question". Same as HIST 350.

***[WS 390] Topics in Women's Studies***

This is an upper division topical course and may be repeated when the topic changes.

***[WS 394] Research in Women's Studies***

Directed research course in Women's Studies. Topics covered include research techniques, methodologies and academic writing in Women's Studies. May be repeated once for credit.

***[WS 397] Independent Study***

Directed readings and discussion on particular topics agreed upon by instructor and student.

***[WS 406] DNA as Destiny: Genetics and Society***

This course examines the various ethical, legal and social implications (ELSI) of genetic research and the applications of current and future applications of new genetic technologies. It is designed to provide students in any major, with the necessary background to make informed decisions about these issues in a socially and civically responsible manner. MnTC Goal 9.

***[WS 407] Inclusive Science: Women, Gender and Science***

This course will compare and contrast traditional views and feminist critiques of science, define gendered science and examine the potential for restructuring science. Students will practice the critical review of scientific readings and analyze and reflect upon the ethical dimensions of scientific issues related to gender. The course investigates collaboration between Women's Studies scholars and scientists, and culminates with field observations and the critique of science in the academy and the private sector. MnTC Goal 6 and 9.

***[WS 408] Women and Art***

This course examines the history of women artists as well as the representation of women as subjects in art. The course also provides a historical introduction to feminist art history and methodology. Same as ART 408.

***[WS 412] Seminar in Women's Studies***

Study of selected problems in Women's Studies through various disciplines including those from the humanities, arts, social sciences and natural sciences. The course employs the objectives of interdisciplinary studies as applied to selected topics. Specific topics will be announced in the class schedule. Students may repeat the course two times when topic varies. Core class for Women's Studies Minor program.

***[WS 415] Media and Diverse Identities***

This course focuses on the analysis of media representations of diverse identities with an emphasis on the interconnections of race, gender and class. Students will use feminist theory and ethics, afrocentric criticism, queer theory and masculinity studies to critically analyze representations of diverse identities in print,

television, advertising, film and the internet. Students will develop their own media, in the form of digital storytelling, to speak back to dominant narratives analyzed in the course. MnTC Goal 9.

***[WS 420] Feminism in Global Perspective***

A topical survey of women's issues in various regions of the world with a focus on manifestations of feminism in different cultural contexts. Topics include women's rights as human rights, sex tourism and trafficking, genital mutilation, religious systems and women, and reproductive rights. Core class for Women's Studies Minor program. MnTC Goal 5 and 8.

***[WS 469] Internship***

A supervised practical experience in Women's Studies. Students must be Women's Studies majors with at least junior standing. A maximum of 12 internship credits may be applied to the degree.

***[WS 470] Undergraduate Teaching Assistant***

Students will serve as a teaching assistant for select Women's Studies courses under the guidance of a faculty mentor. May be repeated up to three times for credit.

***[WS 490] Topics in Women's Studies***

This is an upper division topical course and may be repeated when the topic changes.

***[WS 495] Topics in Feminist Theory***

Courses offered under this title will focus on feminist theories as frameworks for work on feminist issues. For specific topic see class schedule. Topics may include Knowledge, Ethics, Ecology, Reproductive Rights and Issues, Self-images and Identity, and Sexuality. Students may register more than once when content varies, but may not repeat the course for more than 6 credits. Same as PHIL 495.